Understanding the Early Years

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Early Childhood Development in Southwestern Newfoundland

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Executive Summary

Understanding the Early Years *(UEY) is a national research initiative. It provides communities with information to enable them to make informed decisions about the best policies and most appropriate programs for families with young children. It seeks to provide information about the influence of community factors on children's early development and to improve the community's capacity to use these data in monitoring child development and creating effective community-based responses.*

This report is one of five community reports describing children's outcomes and explaining them in terms of three factors: family background, family processes, and community factors. Children's outcomes were assessed in three major categories: physical health and well-being, cognitive skills, and behavioural measures.

Each evaluation comprised several measures:

- *Family background* includes information on the parents' income, level of education, and occupational status.
- *Family processes* include positive parenting practices, engagement in learning activities, family functioning, and maternal mental health.
- *Community factors* include social support and social capital, neighbourhood quality and safety, use of recreational, cultural, and educational resources, and residential stability.

The children of Southwestern Newfoundland are fortunate, because there is a well-established, strong base of family and community support for the early years. However, there is room for improvement. With decisions based on research evidence, effective practices can be developed and Southwestern Newfoundland can continue to work toward achieving the goal of ensuring that every child enters school with the best possible chances of success.

Data for these reports were derived from several sources:

- The *National Longitudinal Survey of Children and Youth* (NLSCY) *Community Study* is a national instrument used to gather data directly from parents and children concerning the health and well-being of Canada's children 5-6 years of age.
- The *Early Development Instrument* (EDI) is based on a teacher's checklist of their kindergarten students' readiness to learn.
- The NLSCY and EDI data collected from the UEY sites allows comparison across the first five UEY communities. Where possible, the outcomes of the children in this community were compared with averages for their province and for Canada as a whole. If data was not available at those levels, the outcomes of the children are compared across the five UEY communities of Southwestern Newfoundland; Prince Edward Island; Winnipeg (School Division No. 1), Manitoba; Prince Albert, Saskatchewan; and Fraser North, British Columbia.

Southwestern Newfoundland is one of the first five sites for the UEY initiative. Valuable lessons will be learned about the needs and strengths of communities with different economic, social and physical characteristics, and about how they are each working to improve their young children's outcomes. This community-based research is important because it allows a community to understand how well its youngest citizens are developing and lends insight into which factors contribute to success and which warrant further consideration.

Study Highlights

Approximately 54% of families in Southwestern Newfoundland were considered low-income, compared to about 43% in Newfoundland, and 23% in Canada overall. Unemployment levels were also high compared with the Canadian average. Over 60% of mothers, and almost 40% of fathers, did not work outside the home. About 28% of households were headed by a single parent.

Using three tests, the National Longitudinal Survey of Children and Youth found that children in Southwestern Newfoundland scored above the national average on direct assessments of their vocabulary, behaviour, and cognitive development. The Early Development Instrument found that the results for the children in Southwestern Newfoundland exceeded the average of all children evaluated in 1999-2000 on four out of the five domains of school readiness.

Overall, the children of Southwestern Newfoundland were healthy and showed strong signs of positive development and readiness for learning. Despite low socio-economic status, parents in Southwestern Newfoundland had very strong parenting skills and were regularly engaged with their children in learning activities, factors which undoubtedly contribute to the community's success in achieving high levels on children's outcomes.

Few residents move within or out of the Southwestern Newfoundland community, which can help its citizens take advantage of strong community and social resources that can engage parents and other caregivers in children's learning activities. The neighbourhoods within the Southwestern Newfoundland community are also considered safe for the children. These factors also contribute to the high outcomes of the community's children.

The role of positive parenting is particularly important. It explained 37% of the differences in physical health and well-being scores, and 131% of the difference in behaviour scores. This latter number for parenting had the highest explanatory power among all communities in explaining behaviour scores.

Based on the community indicator scores for the combined average of the first five UEY communities, use of resources was lower for Southwestern Newfoundland than the combined data of the first five UEY communities, 2.3 and 3.2 on a 10.0 point scale, respectively.

This community can take pride in the success of its young children. However, there is room for improvement. Over 10% of children had low scores on Social Knowledge and Competence and 9.5% had low scores on the nationally standarized Receptive Language Test. Also, the use of educational, cultural, and recreational resources was low in the community. While many children used recreational facilities and educational services, their participation rates were somewhat lower compared to the province and Canada. Participation in activities and use of child-oriented resources is important to a child's social, behavioural and physical development. This emphasizes the value of addressing existing barriers to resource use such as time, cost, and looking at the distribution of certain resources. Since children and their families were not using existing resources to their full potential, their importance for development could be promoted and their presence in the community advertised.

Increasing levels of social support and social capital could contribute to improving children's outcomes. For example, over one-quarter of children in this community live in single-parent families. The timely help of neighbours or family could improve their parenting practices and/or access to community resources.

For Southwestern Newfoundland, the total score out of 100 for family and community indicators was 69.9, which is 3.0 points above the average of 66.9 for the first five UEY communities.

Acknowledgements

This report was prepared by J. Douglas Willms, with the help of Rick Audas, Shawn Dalton, and George Frempong. The author is grateful to the staff of the Applied Research Branch for comments on drafts of this report; and to Sarah Connor, whose report on the UEY project in North York (the prototype community) provided a useful starting point. The author is pleased to acknowledge Sharon Park, the community research co-ordinator for Southwestern Newfoundland, who provided demographic highlights, maps of Southwestern Newfoundland, and information on local services and resources. Without Ms. Park's assistance, the study would not have been possible.

The author would also like to thank Magdalena Janus for her feedback on the EDI analysis. Magdalena Janus, along with Dan Offord and the Canadian Centre for Studies of Children at Risk, developed the EDI described in the first chapter of this report.

I. Introduction

A. What this study is about

Understanding the Early Years (UEY) is an initiative that provides information to help strengthen the research capacity of communities to make informed decisions about the best policies and most appropriate programs to serve families with young children. It seeks to provide information about the influence of community factors on young children's development, and to enhance community capacity to use these data to monitor early childhood development, and to create effective community-based supports. Data describing the outcomes of children ages 5 and 6, as well as the family and community environments in which they live, were collected from three sources: their parents, their teachers, and from the children themselves.

This research report is one of five community research reports describing children's outcomes and explaining them in terms of three factors: family background, family processes, and community factors. Children's outcomes were assessed in three major categories: physical health and well-being, cognitive skills, and behavioural measures.

The data for all five community research reports were based on the National Longitudinal Survey of Children and Youth (NLSCY) and the Early Development Instrument (EDI) assessments. This means that the samples drawn in each of the first five communities were based on families with children ages 5 and 6 who were given both of the NLSCY and EDI assessments.

In order to understand the performance of the children in this community based on the EDI, the results are compared to a larger EDI sample of about 28, 250 children, drawn from selected communities. Although this sample – referred to as EDI-16, is not truly national or representative, it provides a means of comparing children in this community with other 5-6 year old children. The numbers of EDI-16, are different from those used in the EDI monitoring report.[1]

The results from the NLSCY assessments taken by the community children are compared with the national means, developed from the national survey, which has a nationally representative sample.

There is increasing evidence to support the importance of investing in the early years in children's development. New research shows that these formative years are critical, and that the kind of nurturing and stimulation that children receive in their early years can have a major impact on the rest of their lives.

Evidence also suggests that neighbourhoods and communities where children grow and learn directly influence their development. They affect parents' ability to provide the best possible family environment, and the ability of schools to offer the best possible education.

Neighbourhoods, communities, provinces, and regions across Canada differ in important ways. Therefore, gathering community-specific information about children and the places where they are raised can help the policy sector[2] deliver programs that are sensitive and responsive to local conditions. Understanding the Early Years can contribute to this process.

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[1] The EDI community monitoring report uses only EDI data. Whereas, the EDI data in this report are based on only those children and parents who completed the NLSCY community study as well as the EDI. In other words, to be included in the EDI sample for this report, children and their parents also completed the NLSCY Community Study, subsequently, the numbers in the EDI report and the research report will not be the same.

[2] "Policy sector" is broadly conceived to include families, the private and voluntary sectors, and governments at local, provincial and federal levels.

Figure 1.1 – The Southwestern Newfoundland community

This research report provides baseline information about kindergarten children in Southwestern Newfoundland. Figure 1.1 shows the geographic area where the children and families sampled in this study live.

The first aim of this report is to assess how children fare in their learning and behavioural outcomes and in their physical health and well-being. It considers children's developmental outcomes shortly after they begin kindergarten. Where possible, the report provides provincial- and national-level information with which local conditions can be compared.

The report's second aim is to discern how important certain family and community factors are in affecting children's development, as well as to provide some indication of what actions might further improve children's outcomes in this community.

The report sets out ten indicators upon which this community can act over the next few years. If the policy sector can devise ways of improving the processes associated with these empirically based indicators, it is likely that children's outcomes during the formative years will improve as will their chances of leading healthy and fulfilling lives.

B. How the study was conducted

The information contained in this document was collected and analyzed using a variety of methods.

Two major types of information about the children were collected. The first considers their "readiness to learn", which comprises five major developmental domains:

- Physical health and well-being
- Social competence
- Emotional maturity
- Language and cognitive development
- Communication skills and general knowledge

Information for this set of domains was collected by teachers, using a checklist called the Early Development Instrument (EDI) developed by Dr. Dan Offord and Dr. Magdalena Janus at the Canadian Centre for Studies of Children at Risk, McMaster University. Teachers of all kindergarten children attending English language and French Immersion public schools in the community were asked to complete the checklist about the behaviours and development of each child in their class. This information was used to determine how ready the community's children, as a whole, were for school.

The second type of developmental information was collected through a survey of parents, guardians, and the children themselves. The instruments used in the National Longitudinal Survey of Children and Youth Community Study were administered to children and their parents. This was done to acquire more detailed information about the experiences of children and families in Southwestern Newfoundland, as well as, measures of children's outcomes regarding their cognitive skills, pro-social and behaviour outcomes. In addition, information regarding childcare arrangements (e.g., whether children were cared for by parents, relatives, or non-relatives, either at home or outside the home) was collected.

A random sample of 289 kindergarten children from Southwestern Newfoundland was selected to participate in this survey. Statistics Canada interviewers collected detailed information from and about these children using instruments from the NLSCY

Community Study. The major instruments measuring children's outcomes include:

- Vocabulary skills (Peabody Picture Vocabulary Test, Revised) – Test of receptive vocabulary administered to each child.
- Developmental Level (Who Am I?) – Test of early literacy administered to each child.
- Number knowledge (Number Knowledge Assessment) – administered to each child.
- Behaviour Outcomes – determined by in-depth telephone interviews with the person most knowledgeable, usually the mother.

The interviewers also collected information about several family and community factors that can help explain the patterns of child development in the community.

Children completed assessments that asked them to draw, print symbols, (e.g., letters and words), show their understanding of quantity and number sequence, and match pictures to words that they heard. Their families provided information about their social and economic backgrounds, their children's activities and involvement in the community, their health, and their social, emotional, and behavioural development.

Because the NLSCY questionnaire is also used across the country as a national survey, the outcomes for children in this community can be compared with national data.

C. Why the study is of interest

Understanding the Early Years combines information about children with information about their families and the communities in which they live. This, in turn, provides an understanding of the relationship between children's outcomes and the environments in which they are raised. This is important for Canada's parents and communities who want to help their children develop well. Second, it helps the individuals, institutions, and communities who work with children to understand these processes at the levels where action is often most effective, the neighborhood and community.

This report highlights some of the key findings from the information that was collected from teachers, parents, and their children. It examines the overall development of children in kindergarten (through the Early Development Instrument) and provides a more detailed look at the outcomes of these children (through the NLSCY Community Study). It suggests some of the unique strengths from which Southwestern Newfoundland can work, and some challenges to overcome in continuing to build a collective commitment to ensure the health, well-being, and positive development of its young children.

D. Socio-economic status in study area

Socio-economic status (SES) is an important variable in social research because it affects a person's "chances for education, income, occupation, marriage, health, friends, and even life expectancy."[3] This report describes children's outcomes and how they are affected by family socio-economic status, family processes, and community resources. Thus, it is helpful to have an understanding of the socio-economic backgrounds of the families in this community, as well as how these are distributed geographically across the study area. Socio-economic status is usually quantified as a composite measure comprising income, level of education, and occupational status. Accordingly, the measure of SES used here combines the income, level of education, and occupational status of the children's

[3] Miller, Delbert C. 1991. *Handbook of Research Design and Social Measurement*. Sage Publications, Inc. Newbury Park, CA. p. 327.

parents. Other family factors, such as family structure (e.g., single- vs. two-parent family), or whether the mother was a teenager when the child was born, are not dimensions of SES (although they are usually correlated with SES). Additional aspects of family and community structure will be presented in Section III.

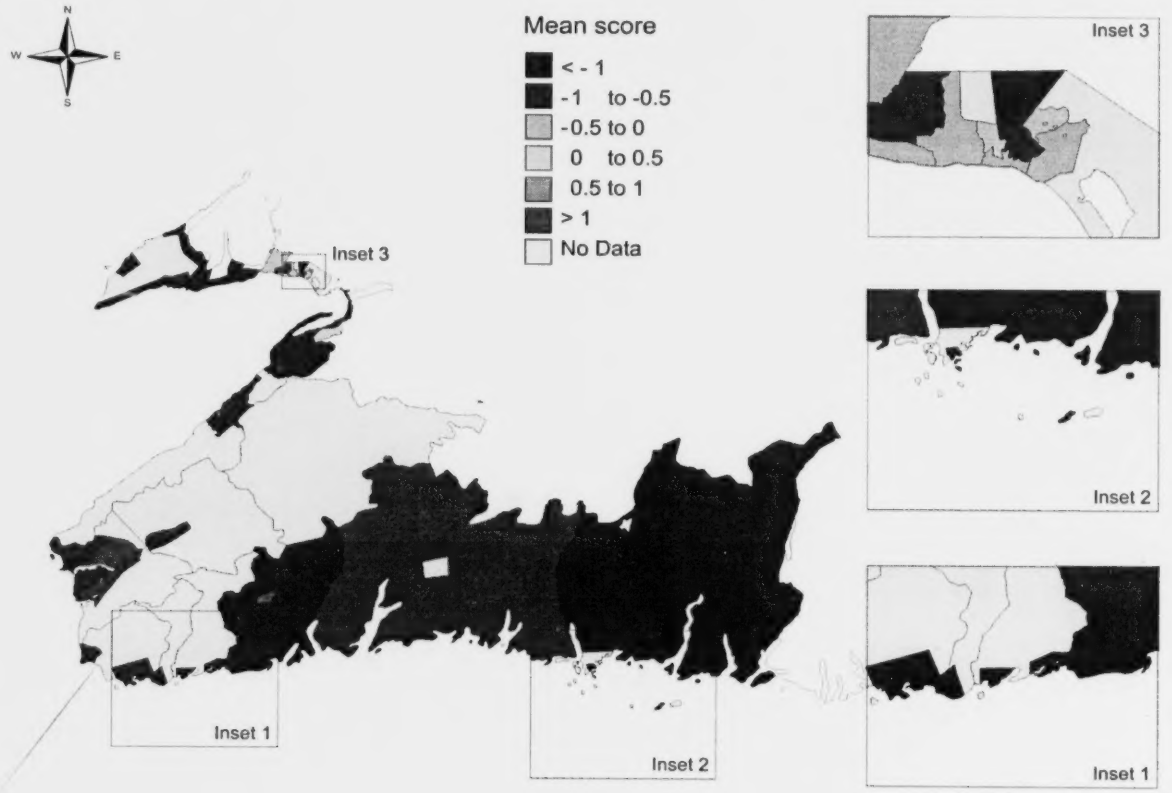
Figure 1.2 shows the distribution of socio-economic status of Southwestern Newfoundland. The figure clearly shows that this community has a relatively low socio-economic status, compared with other areas of Canada. Many of the enumeration areas in Southwestern Newfoundland (EAs) have SES scores below –1, and all but one of the other EAs have scores below the national average (shown in orange or red). The disparities in socio-economic status will also be apparent in the results presented in Section III, which describe the family background characteristics of the children and families sampled in this study.

Despite the relatively low socio-economic status of this community, the children of Southwestern Newfoundland scored higher than the national averages for most outcomes measured with the EDI and the NLSCY instruments. Moreover, the spatial distribution of outcomes does not match SES patterns, indicating that there are many children in poor areas who are faring quite well.

Inset 1 - Socio-economic Status

The measure of socio-economic status (SES) for the map in Figure 1.2 was derived from the 1996 Canadian Census, based on data describing enumeration areas (EAs), which represent a geographic unit of about 400 families. The measure of SES is a composite score derived from census measures of family income, level of education, and the occupational status of adults living within each enumeration area. The composite scores were standardized, such that the average score for all EAs in Canada was zero, and the standard deviation was one. With this standardization, only about one in six EAs scored below -1 (low SES shown in dark red), and about one in six scored above +1 (high SES shown in dark green) in Southwestern Newfoundland.

Figure 1.2 – Socioeconomic Status of the Southwestern Newfoundland community



II. The Outcomes for Children of Southwestern Newfoundland

A. How the outcomes were measured

This section provides more information about the specific measures of children's outcomes. A child's cognitive skills, behaviour, and physical health and well-being outcomes were measured in two ways, using the NLSCY Community Study and the EDI.

Five Domains for EDI (teacher report):

Physical health and well-being: children's motor skills, energy levels, fatigue and motor co-ordination.

Social competence: self-confidence, tolerance, and children's ability to get along with other children, to accept responsibility for their own actions, and to work independently.

Emotional health and maturity: children's general emotional health and maturity. It also identifies minor problems with aggression, restlessness, distractibility or inattentiveness, as well as excessive, regular sadness.

Language and cognitive development: mastery of the basics of reading and writing, interest in books, and numerical skills (e.g., recognizing numbers and counting).

Communication skills and general knowledge: children's general knowledge, their ability to articulate clearly, and their ability to understand and communicate in English.

Cognitive Skills (from the NLSCY – direct assessments of the child):

Inset 2 - The Early Development Instrument contained more than 70 questions, and asked teachers the following types of questions about each child in the class:

- **Would you say that this child follows instructions, accepts responsibility and works independently?**
- **How often is the child too tired to do school work?**
- **Is the child well co-ordinated?**
- **Would you say that this child is upset when left by a caregiver, has temper tantrums, appears worried, cries a lot?**

Teachers were also asked to comment on the child's use of language to communicate, his or her interest in books, and his or her abilities related to reading and writing. They were also asked about children's communication skills and general knowledge.

Vocabulary skills (Peabody Picture Vocabulary Test, Revised – PPVT-R) assesses a child's receptive or hearing vocabulary. The children hear a word said aloud and are asked to point to one of four pictures that they believe corresponds to the word.

Developmental Level (Who Am I?) is based on copying and writing tasks, which are designed to test their ability to conceptualise and to reconstruct a geometrical shape and to use symbolic representations, as illustrated by their understanding and use of conventional symbols such as numbers, letters, and words. Children are asked to copy five shapes (such as a circle or a diamond), and to write their names, numbers, letters, words, and a sentence. *Who Am I?* can be used to assess the cognitive development of children; because the tasks are not dependent on language, English or French, regardless of their facility with it.

Number knowledge (Number Knowledge Assessment) is designed to test the child's understanding of numbers. Children who do not have this understanding, or who are working in a language different from their mother tongue, often have difficulty mastering basic arithmetic and demonstrating number sense. The *Number Knowledge Assessment* evaluates children's understanding of quantity (more vs. less), their ability to count objects, their understanding of number sequence, and their ability to do simple arithmetic.

Behaviour Outcomes (from NLSCY Community Study – parent report)

Identifying a child's behaviour is based on assessments by the person most knowledgeable about the child, usually the mother.[4] The measurements comprise several questions, each with the same format. The mother is asked how often her child cannot sit still, is restless or is hyperactive. She answers with one of three possible responses – "never or not true"; "sometimes or somewhat true"; and "often or very true." The assessment included the following elements:

Positive social behaviour: children who exhibit higher levels of positive social behaviour are more likely to try to help and comfort others. They may offer to help pick up objects that another child has dropped or offer to help a child who is having trouble with a difficult task. They might also invite their peers to join in a game.

Indirect aggression: this element identifies children who, when mad at someone, try to get others to dislike that person; who become friends with another for revenge; who say bad things behind the other's back; who say to others, "Let's not be with him/her"; or who tell secrets to a third person.

Hyperactivity: hyperactive children cannot sit still; are restless and are easily distracted; have trouble sticking to any activity; fidget; cannot concentrate; cannot pay attention for long; are impulsive; have difficulty waiting their turn in games or groups; cannot settle to do anything for more than a few moments.

Emotional disorder/anxiety: this element identifies children who seem to be unhappy, sad, or depressed; are too fearful or anxious; are worried; cry a lot; tend to be rather solitary; appear miserable, unhappy, tearful, or distressed; are not as happy as other children; are nervous, high strung, or tense; have trouble enjoying themselves.

Physical aggression & conduct disorder: these children get into many fights. When another child accidentally hurts them (by bumping into them, for example), they assume that the other child meant to do it, and then react with anger and fighting. Also included are children who kick, bite, or hit other children; physically attack people; and who threaten people, are cruel or bully others.

B. What we learned from teachers: Results of the Early Development Instrument

The children of Southwestern Newfoundland scored well overall on the five domains of the EDI, for example, 8.7 for physical health and well-being, 8.2 for social knowledge and competence, 7.6 for emotional health and maturity, 8.4 for language and cognitive development, and 8.2 for communication skills and general knowledge (see Table 2.1).[5]

[4] Statistics Canada trained personnel conducted the parent interviews by telephone only in English or French for the NLSCY. Parents without telephones or speaking other languages were not interviewed.

[5] The EDI sample size, N=258, included valid data only. To be included in the EDI sample size for Southwestern Newfoundland children needed scores on at least 3 out of the 5 EDI domains. This explains why the EDI sample size (N=258) is different from the NLSCY sample size (N=289) for Southwestern Newfoundland.

Southwestern Newfoundland scored 1.0 point above the EDI-16 for communication skills and general knowledge, +0.7 for social knowledge and competence, +0.3 above for language and cognitive development, and 0.1 above for physical health and well-being. They scored 0.3 below the EDI-16 on emotional health and maturity.

Table 2.1 – **Mean Scores on the Early Development Instrument for Southwestern Newfoundland and the Comparison Sample (EDI-16)**

	Southwestern Newfoundland UEY Community (N=258)		EDI-16 (N=28,250)	
	Mean	SD	Mean	SD
Physical Health and Well-being	**8.7**	1.2	8.6	1.1
Social Knowledge and Competence	**8.2**	1.9	7.5	1.5
Emotional Health and Maturity	**7.6**	1.5	7.9	1.5
Language and Cognitive Development	**8.4**	2.0	8.1	1.9
Communication Skills and General Knowledge	**8.2**	1.8	7.2	2.1

Note: Figures in blue text differ significantly ($p < .10$) from the EDI-16.

Figure 2.1 – **Box plots comparing the distribution of EDI scores for Southwestern Newfoundland with the EDI-16**

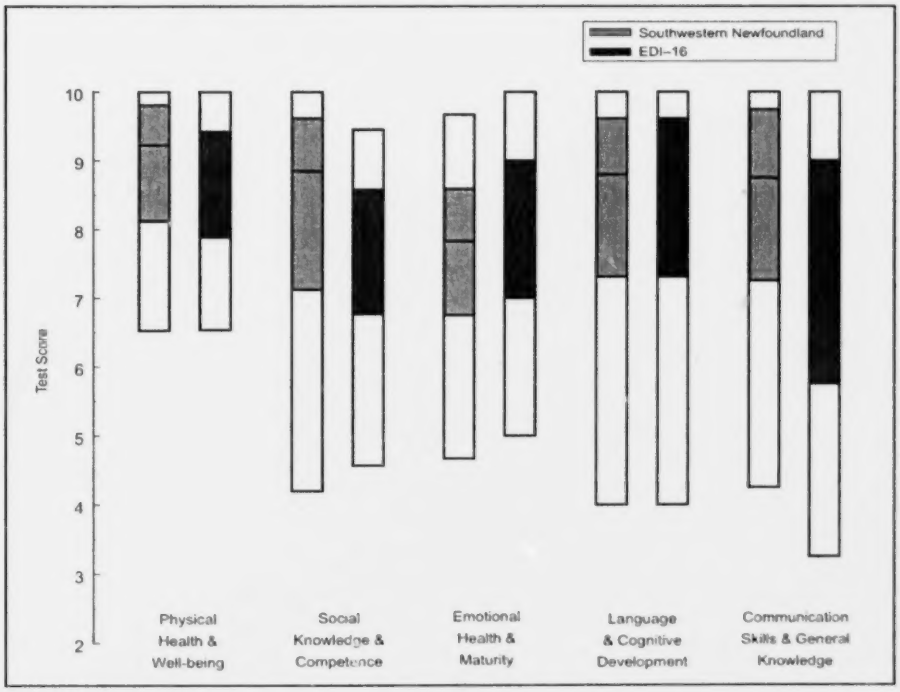


Figure 2.1 shows that the median scores for the EDI domains in Southwestern Newfoundland are higher than those in the EDI-16 sample, with the exception of Emotional Health and Maturity.[6] The range of scores, as indicated by the length of the boxes and the inter-quartile range, is similar to the EDI-16 sample.

Inset 3 shows the median and percentiles for the distribution of EDI scores for each group. The median represents the point at which 50% of the cases fall below and 50% of the cases fall above the median. Percentiles refer to the percentages of cases with values falling above and below them.

Inset 3 - Percentile Plots

The percentile plots display the distribution of the EDI scores for each group as follows:

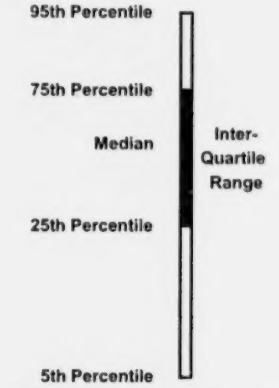
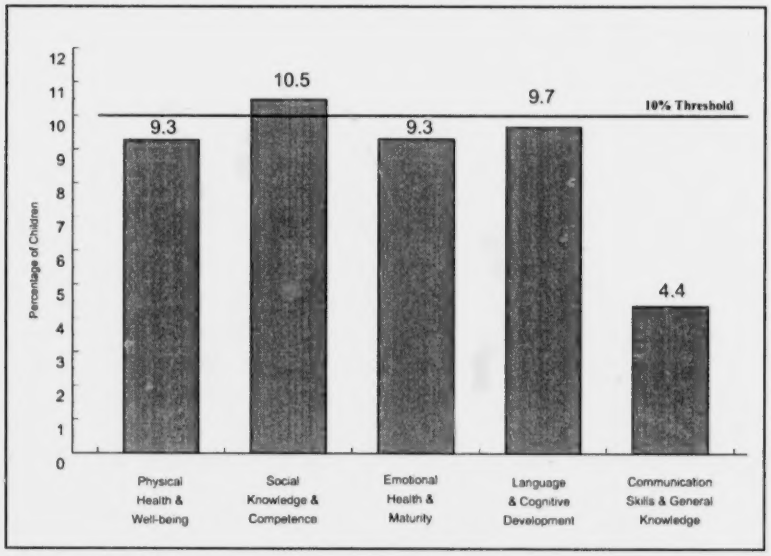


Figure 2.2 – **Percentage of children with low scores on the Early Development Instrument (Southwestern Newfoundland).**



Note: Significant differences ($p<.05$) are indicated with red text.

[6] The longer the boxes, the greater range of variability in the EDI domain scores. For example, the physical health and well-being domain has a short box which indicates that scores are similar to one another. In contrast, the communication skills and general knowledge domain has a longer box which indicates that scores varied more from one another.

Data from the EDI-16 were also used to establish a "low score" threshold for each EDI domain. The low-score threshold scores were set to the tenth percentile, which means that 10% of all children in the sample scored below the threshold for each domain. Thus, if a community had typical results, we would expect 10% of its children to score below the same threshold scores for each domain. Typically, communities have the highest scores in the physical health and well-being domain. This finding may not be surprising, given universal access to health care for Canadians.

In Southwestern Newfoundland, however, the percentage of children with low scores ranged from 4.4% to 10.5% across the five domains. The area of greatest concern was Social Knowledge and Competence (10.5%), however, this was only slightly higher than the 10% threshold (see Figure 2.2).

The data collected as part of the *Understanding the Early Years* study included information about where each child resided. Therefore, an analysis was conducted that would give some indication of how children's scores on the EDI were distributed geographically. To achieve this, the average score within each enumeration area was determined, for each domain of the EDI. The average score for each enumeration area was then "smoothed".

Figures 2.3 through 2.7 display the geographic distribution of the EDI scores for each of the domains.

It is important to recognize that while some areas have generally high scores, there will always be some children needing extra support in any given neighbourhood.

Figure 2.3 indicates that there are a number of EAs in the northwestern section of this community that received low scores on Physical Health and Well-being. However,

Inset 4 - Smoothing Data

This is a statistical technique that involves estimating the mean score for a particular EA together with the scores for all of the EAs that immediately surround it (the technical term is "geographically contiguous"). Smoothing the spatial data in this way provides a more accurate display of what we would expect if all kindergarten children in the community had participated in the EDI. It also ensures that the confidentiality of individuals, or small groups of individuals, is not compromised.

most areas received medium to slightly high scores and a few received very high scores. This tells us that the majority of children with low scores in Physical Health and Well-being are concentrated in one area of the community.

Figure 2.4 shows that scores in Social Knowledge and Competence are also evenly distributed across this community. Again, higher scores can be detected across the central EAs in the community.

Figure 2.5 presents information somewhat anomalous to the others. It indicates that children with low scores in emotional health and maturity are concentrated in the central and western sections of the community.

Figure 2.6 indicates that children in the central areas of the Southwestern Newfoundland community exhibit higher scores on Language and Cognitive Development. Children with lower scores tend to be concentrated in the northwestern corner of the community.

Figure 2.7 depicts the same general trend for Communication Skills and General Knowledge– medium to high scores in the central areas of the community, and lower scores in the northwestern corner.

Figure 2.3 – The Geographic Distribution of EDI Scores for Physical Health and Well-Being

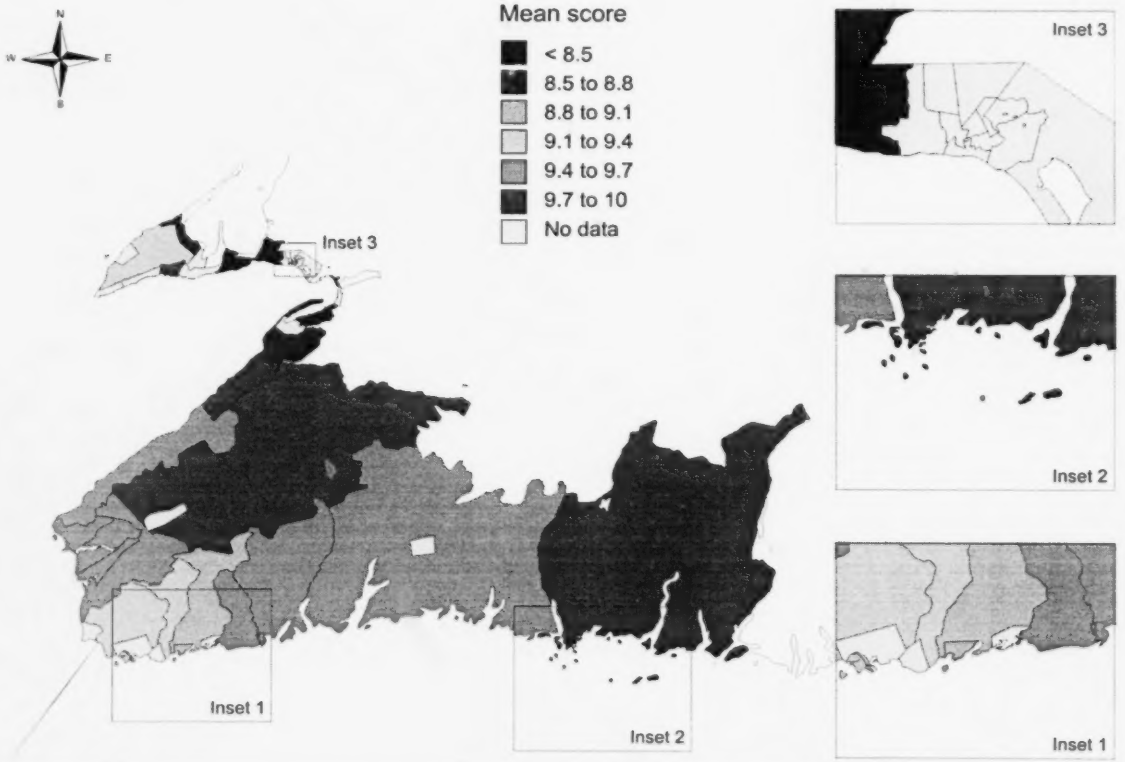


Figure 2.4 – The Geographic Distribution of EDI Scores for Social Knowledge and Competence

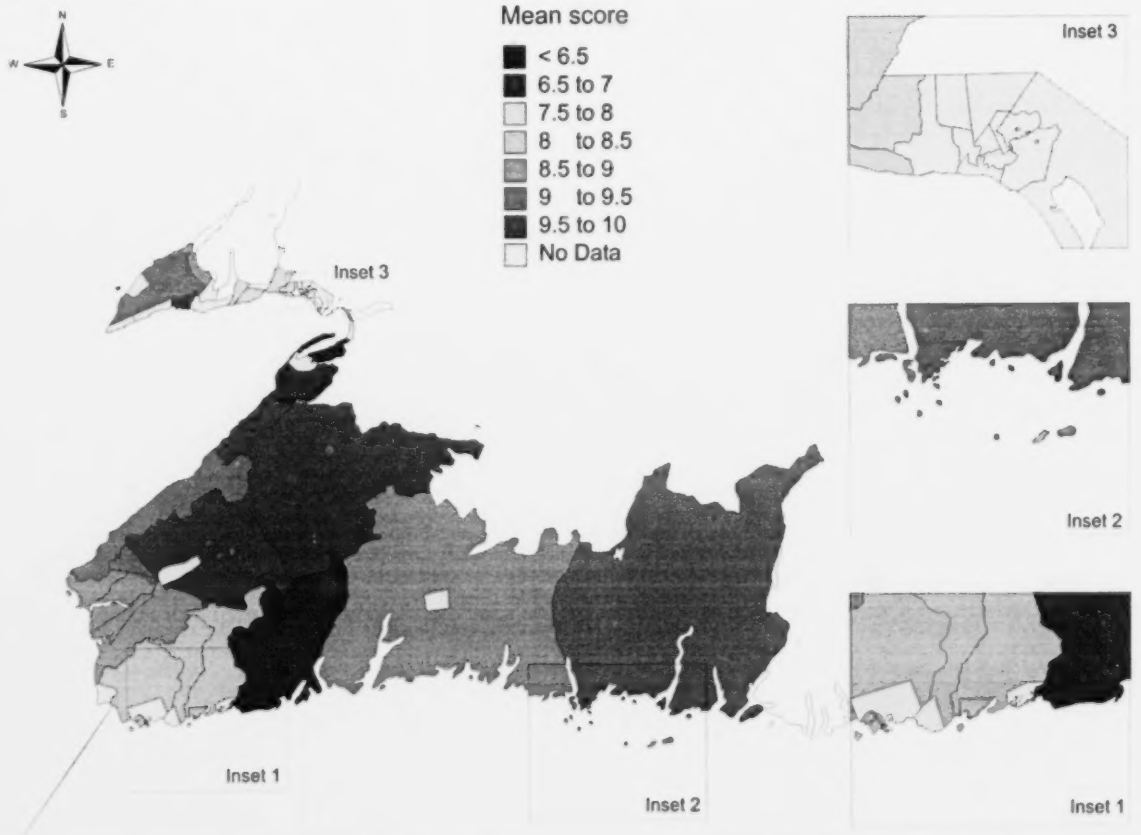


Figure 2.5 – The Geographic Distribution of EDI Scores for Emotional Health and Maturity

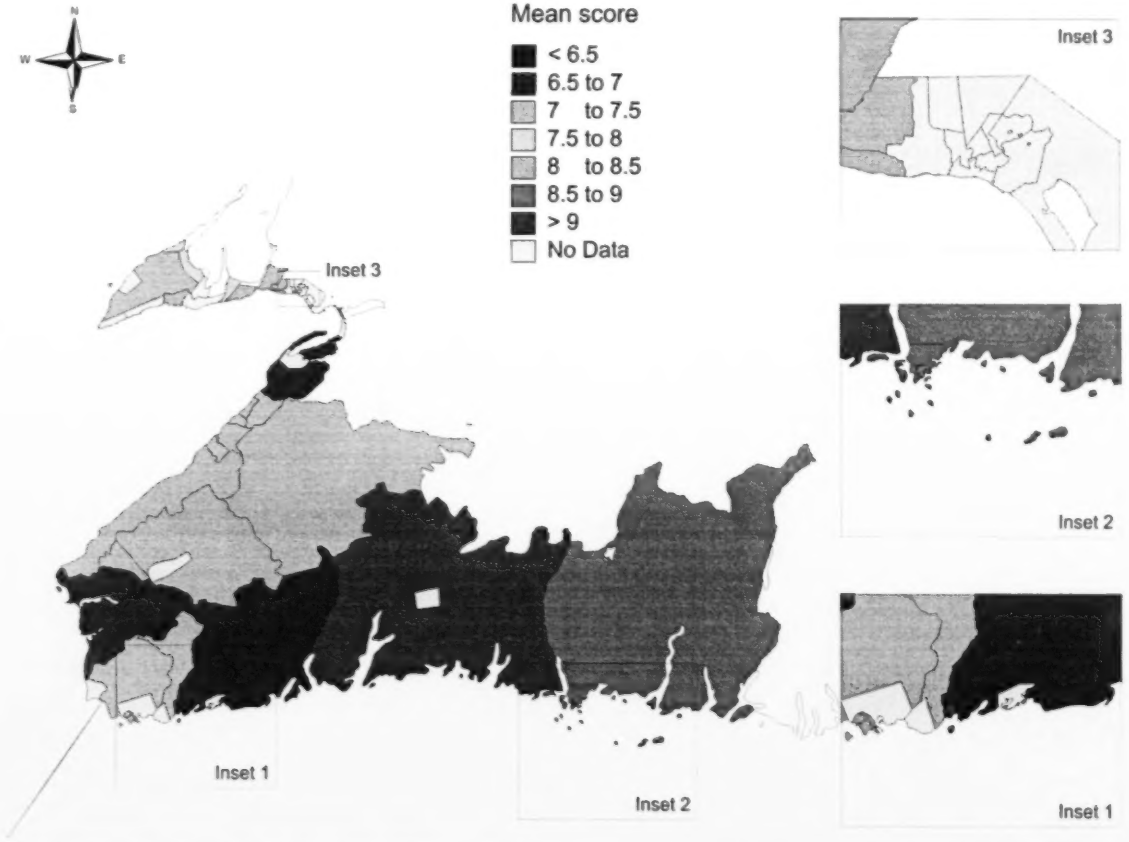


Figure 2.6 – The Geographic Distribution of EDI Scores for Language and Cognitive Development

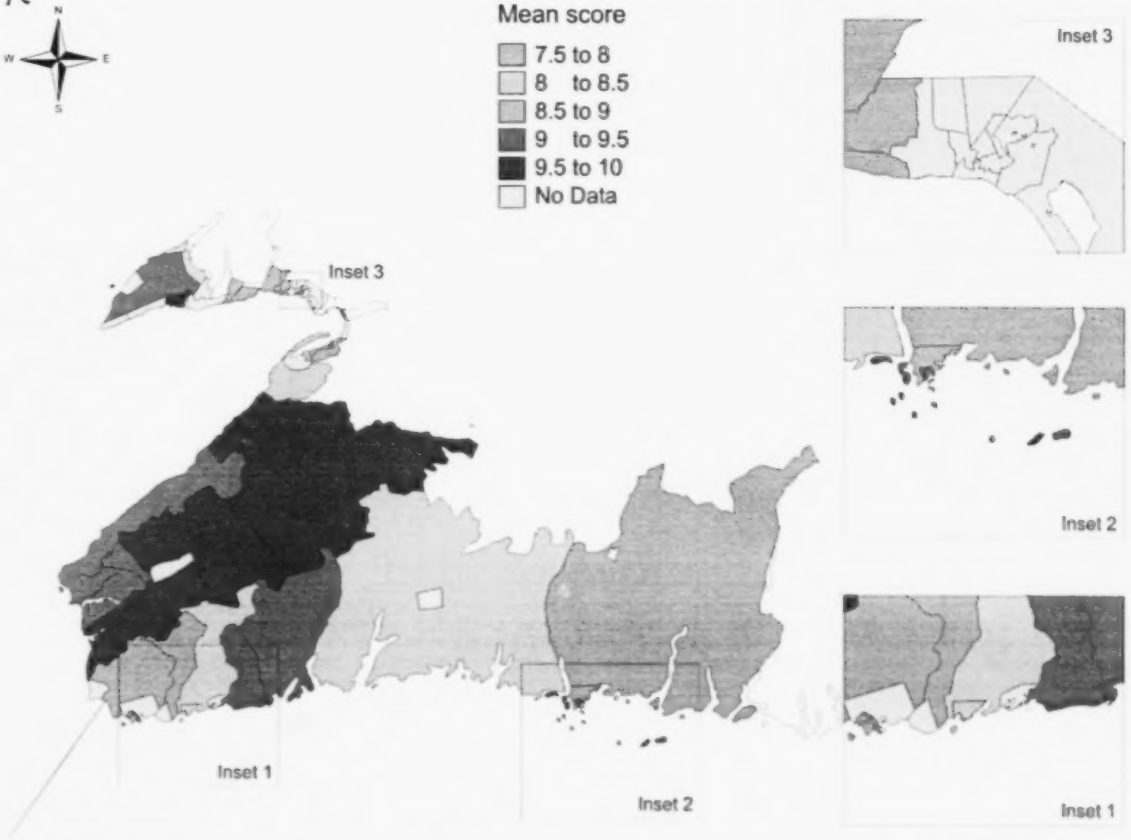
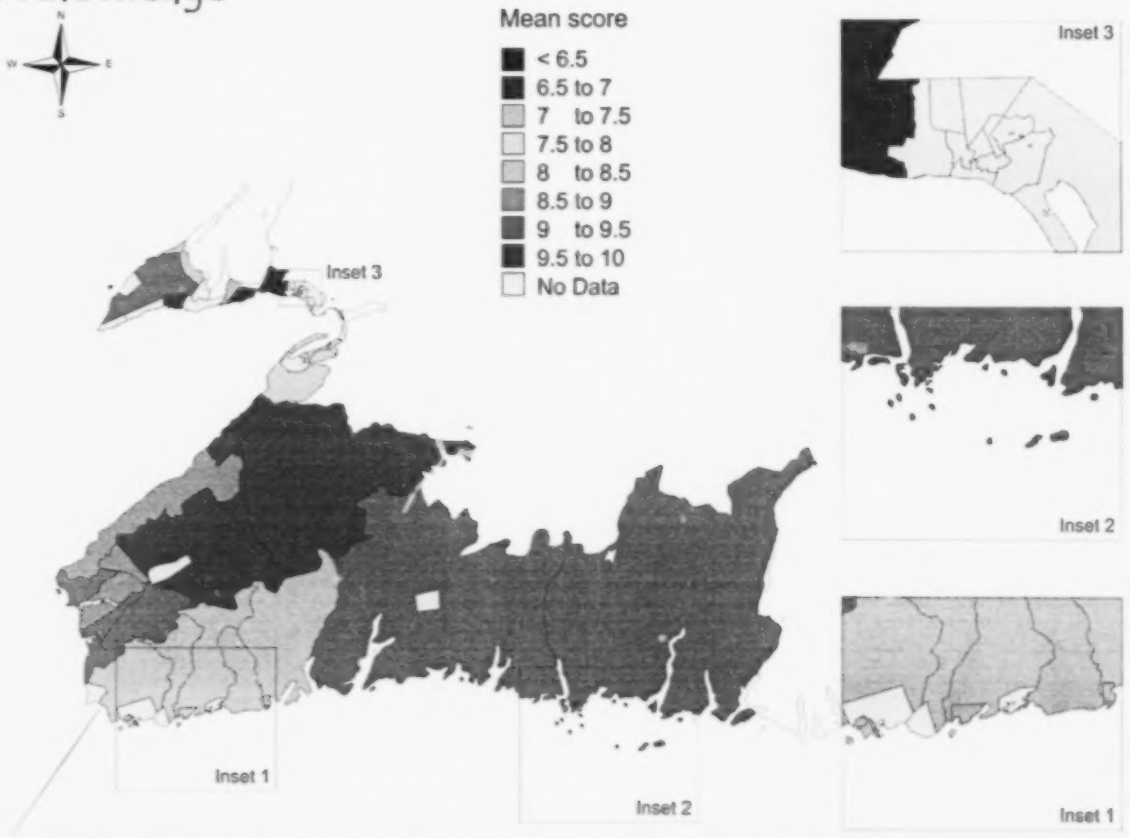


Figure 2.7 – The Geographic Distribution of EDI Scores for Communication Skills and General Knowledge



The maps show a general tendency for enumeration areas (EAs) in the central areas of the study site to score at or higher than average on each of the outcomes measured. These areas, spatially, are larger implying a more rural setting. This is true of all measures except for Emotional Health and Maturity, which is lower than average in most of the EAs in addition to the northern and southern ones. Of particular interest here are the EAs in the eastern sections of the community, which consistently met or exceeded averages for children's outcomes, but are at the community's poorest areas in terms of socio-economic measures (see Figure 1.2).

We might expect children in areas of higher concentrations of population (which is implied by the smaller size of those enumeration areas) to interact more frequently with other children and with adults, have access to more resources and facilities, and have better outcomes in the measures of development. This is not the case in Southwestern Newfoundland. Children in larger, more rural EAs, generally, scored higher in terms of all the outcomes measured, with the exception of Emotional Health and Maturity.

The maps indicate that socio-economic background is not a definitive predictor of EDI outcomes, and that other factors that influence children's development should be considered. It is likely that these outcomes can be more fully explained if additional family and community factors are taken into consideration.

C. What we learned from parents, guardians, and the children: NLSCY Community Study results

In this section, we discuss the results of the National Longitudinal Survey of Children and Youth Community Study, which measures children's cognitive skills, positive social behaviour, and behaviour problems.

Table 2.2 displays the means and standard deviations of scores on the *Developmental Assessment (Who Am I?)*, on the *Positive Behaviour Scale*, and on the *Receptive Language (PPVT-R) Test* from the NLSCY for Southwestern Newfoundland.

The average scores on all three measures for Southwestern Newfoundland are above 100, indicating that the children are achieving scores above the national mean (see Inset 5). Figure 2.8 displays the distribution of scores.

Inset 5

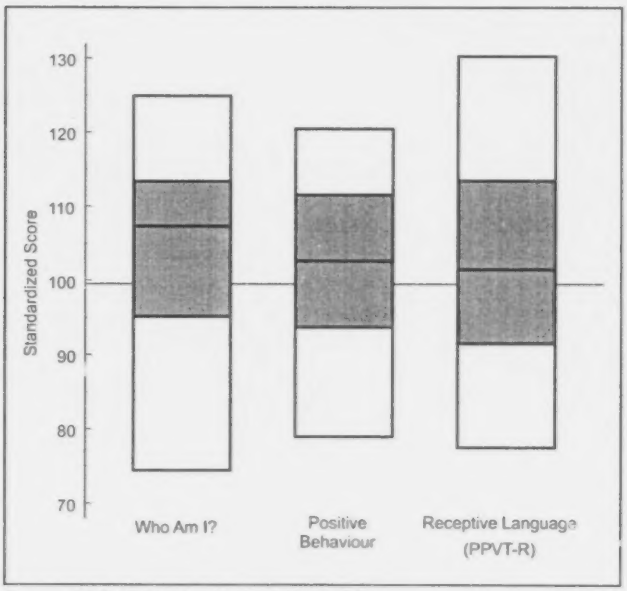
For the Receptive Language Test, national norms were available, and the scores are scaled such that the national mean is 100, and the standard deviation (a measure of the spread of scores) is 15. National norms were not available for the *Development Assessment (Who Am I?)* or the *Positive Behaviour Scale*, but to maintain some degree of comparability, the scores were scaled to have a mean of 100 and a standard deviation of 15 for the entire sample of children who participated in the first five studies of the UEY project (see Table 2.2)

Table 2.2 – Mean Scores on Standardized Instruments from the NLSCY Community study for the Southwestern Newfoundland UEY Community

	Mean	Standard Deviation
Who Am I? (N=243)	**104.4**	15.0
Positive Behaviour (N=286)	**102.2**	13.6
Receptive Vocabulary (PPVT-R) (N=284)	**103.0**	16.3

Source: NLSCY (cycle 3) data, 1999-2000.
Note: Figures in blue are significantly different from the national standardized mean of 100.

Figure 2.8 – Box plots comparing the distribution of Scores on the Who Am I?, Positive Behaviour Scale, and the PPVT-R.

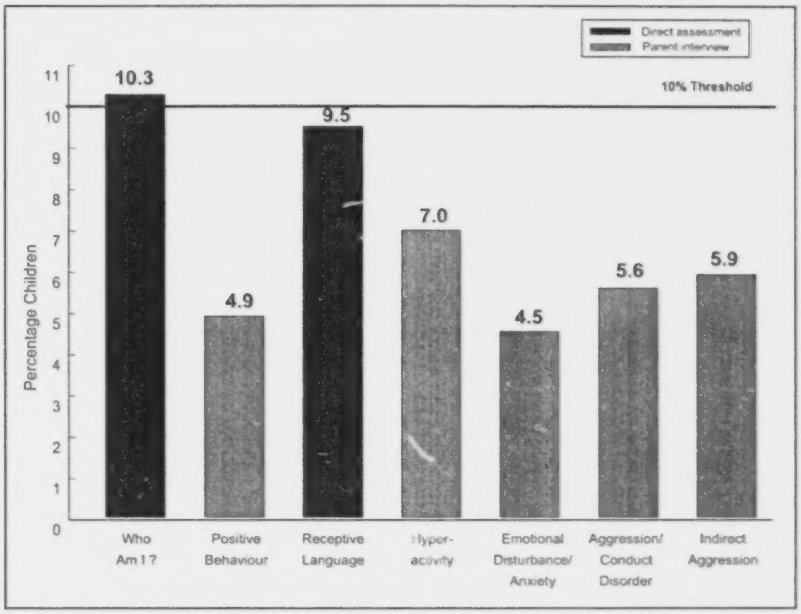


Source: NLSCY data (cycle 3), 1999-2000.
Note: See Inset 3.

Figure 2.9 shows the distribution of children with low scores on the *Developmental Assessment (Who Am I?)*, the *Positive Behaviour Scale*, and the *Receptive Language Test*. It also shows the percentage of children deemed to have a behaviour problem, based on four measures of behaviour (hyperactivity, emotional disturbance/anxiety, aggression/ conduct disorder, and indirect aggression).

For each measure, the score at the tenth percentile of the national NLSCY was used as the threshold to define a low score. The percentage of children in the community

Figure 2.9 – Percentage of Children with Low Scores on the Cognitive and Behavioural Measures Southwestern Newfoundland



Source: NLSCY data (cycle 3), 1999-2000.
Note: Children were directly assessed for the Who Am I? And Receptive Language (PPVT-R).

scoring below the threshold provides a means of comparing against the 10% scoring below the threshold nationally.

In Southwestern Newfoundland, the percentage of children with cognitive difficulties, based on the *Development Assessment (Who Am I?)* and the *Receptive Language Test* were 10.3% and 9.5% respectively, which is consistent with national norms. On the behavioural measures, there were relatively few children in this community with behaviour problems: 4.9% had low scores on the *Positive Behaviour Scale*, 4.5% for Emotional disturbance/anxiety, 5.6% for aggression/conduct disorder, 5.9% for indirect aggression, and 7.0% on hyperactivity. Overall, the children in Southwestern Newfoundland fare well compared with children of the same age living elsewhere in Canada.

The study also included a direct measure of a child's understanding of the system of whole numbers. Scores were classified according to developmental levels:

- Have not reached level 1
- Reached level 1 (usually attained by 4-year-olds)
- Reached level 2 (usually attained by 6-year-olds)
- Reached level 3 (usually attained by 8-year-olds)

For all of the children who did the assessment across the first five UEY sites, only 1.2% had failed to reach level 1. A minimal number of children were below level 1, about a third (29.4%) were at Level 1, and two-thirds (67.2%) were at level 2. Only 2.2% of the UEY children had reached level 3. These results are as expected given that the UEY children were 5 and 6 years old.

In Southwestern Newfoundland, 70.5% of the children sampled had made the transition to at least level 2, which is comparable to the average of 69.4% for the five UEY sites.

Overall, these findings also indicate that the children of this community scored higher than children in the national sample. The scores on the test of Receptive Language are especially encouraging, because they are based on a test administered to children using a standard method and can be compared with scores of other children in the country. The median score on this test was about 3.0 points above the national median, and there was a greater range of scores above the median than in the national sample. The results of the other two assessments indicate that the children in this community scored higher than in the other four UEY communities.

III. How Family Background Affects Children's Readiness for School

In this section, information about the relationship between family background and children's outcomes is presented, and the family background of the children in Southwestern Newfoundland is described. The relationship between family background and children's outcomes is not straightforward. An important goal of *Understanding the Early Years* is to distinguish among the effects of *family background*, and those associated with *family processes* and *community factors* on children's outcomes.

All three sets of contributing factors were measured. First, information on eight characteristics of family background are presented. In an earlier study of children's development, based on the national sample of children who participated in the first cycle of the NLSCY, these family background characteristics were significantly related to a range of children's developmental outcomes. The values, calculated for the eight family characteristics, are:

- **Family income** (in $10,000 units): considered to be low if less than $25,000.
- **Mother's level of education**: considered to be low if the mother did not complete high school.
- **Father's level of education**: considered to be low if the father did not complete high school.
- **Mother's employment status**: considered *not* working outside the home if the mother worked fewer than 25 weeks during the past year.
- **Father's employment status**: considered *not* working outside the home if the father worked fewer than 25 weeks during the past year.
- **Single-parent family**: only one parent or guardian living at home.
- **Number of brothers and sisters**: this is a simple count of the number of siblings living at home.

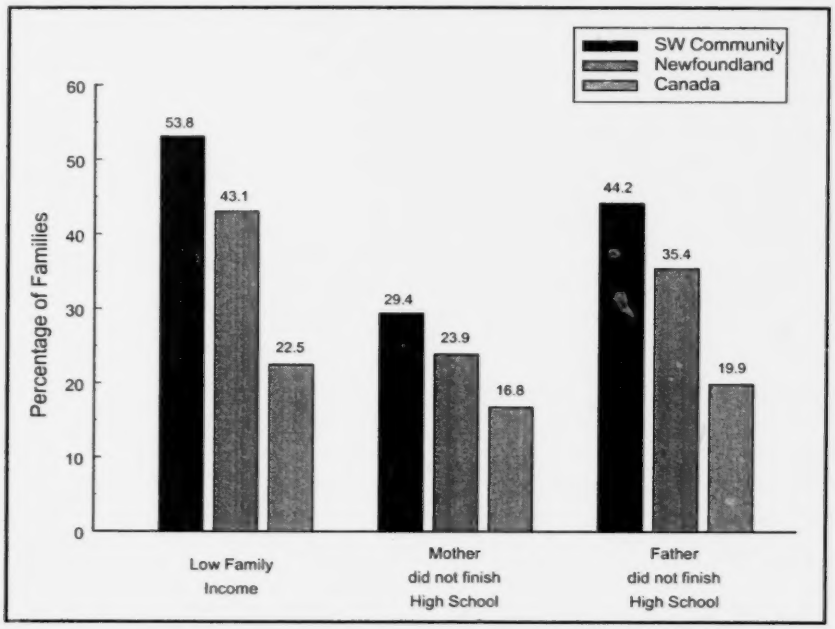
Figures 3.1 and 3.2 show the relative levels of income, education, employment, and single-parenthood for families at the community, as well as provincial, and national levels. These findings are consistent with the findings presented in the first section, which characterized this community as relatively poor in socio-economic terms. For example, nearly 54% of families were considered low-income, compared to about 43% in Newfoundland, and 23% in Canada overall.

More children's mothers had completed high school (70.6%) than fathers (55.8%) in this community. However, compared to both provincial and national averages, parents in this area had relatively low levels of education. Also, fewer mothers than fathers worked outside the home.

Unemployment levels are high for both mothers and fathers in this area, as is the number of single-parent households. Over 60% of mothers, and almost 40% of fathers, did not work outside the home; about 28% of households were headed by a single parent.

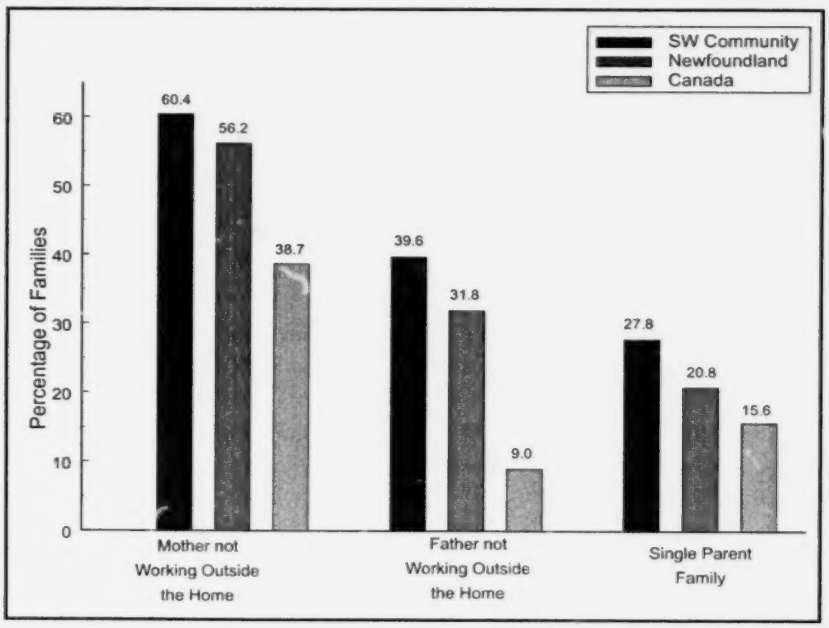
It is likely that the number of children living in low-income, single-parent households is fairly high. Yet, overall, these children's outcomes are comparatively high. Therefore, socio-economic and demographic factors alone do not explain why some children are better prepared in their cognitive and behavioural skills when they enter school.

Figure 3.1 – Family Income and Parents' Education



Source: NLSCY for Southwestern Newfoundland (1999-2000) and national NLSCY (cycle 3).

Figure 3.2 – Parents' Employment and Marital Status



Source: NLSCY for Southwestern Newfoundland (1999-2000) and national NLSCY (cycle 3).

A. The Effects of Family Background Factors on Readiness

The analysis focussed on the factors contributing to whether or not a child had significantly low scores in one of the three developmental domains: the cognitive domain, the behavioural domain, and physical health and well-being.

A child was considered "ready" in the cognitive domain if he or she did not have a low score (e.g., below the 10% threshold) on the *Receptive Language Test*, the *Developmental Assessment (Who Am I?)*, or on the two cognitive domains of the Early Development Instrument.

Similarly, a child was considered ready to learn in the behavioural domain if he or she did not have a low score on the behaviour scale, or on either of the two domains of the EDI pertaining to behaviour, and did not have any one of the four behaviour problems.

A child was considered ready to learn in the physical health domain if he or she scored above the low-score threshold on the Physical Health and Well-being domain of the EDI.

For each of the family background factors, the odds-ratio associated with whether or not a child was ready in these three domains were estimated (see Table 3.1) using the sample of children from all of the first five UEY communities. In other words, the results indicated in Table 3.1 are not specific to Southwestern Newfoundland.

Table 3.1 – **The Relationship Between a Child's Readiness to Learn and Family Background**

	Children's Outcomes		
	Cognitive	Behavioural	Physical Health & Well-being
Family Income ($10,000 units)	**1.16**	**1.11**	1.02
Mother's Education (years)	**1.10**	1.02	**1.10**
Father's Education (years)	1.04	0.99	1.10
Mother Not Working Outside Home	0.98	1.15	1.11
Father Not Working Outside Home	1.22	**1.48**	1.17
Single Parent Family	0.98	0.96	0.70
Number of Brothers and Sisters	**0.90**	**0.91**	**0.81**

Source: NLSCY in relation to 3 EDI domains for the first five UEY communities, 1999-2000.
Note: Figures in blue text are statistically significant at p<.10.

Inset 6 - Odds-ratios

Odds-ratios denote the ratio of the odds of an event occurring after a one-unit change in the independent variable, compared with what it had been previously, if all other independent variables in the model were held constant.

For example, suppose the outcome variable of interest was whether a child repeated Grade 1. If the odds ratio for mother's education was .95, it would indicate that the odds of a child repeating a grade, if his or her mother had 13 years of education, is only 95% as large as the odds for a child whose mother had completed 12 years of education (or 12 years compared with 11 years, etc.).

Thus, in this example, increasing levels of maternal education reduce the odds of a child repeating Grade 1. When an odds-ratio is greater than 1.0, it indicates that the odds of experiencing the outcome (e.g., repeating Grade 1) are greater with increasing levels of the factor being considered.

The results indicate that family income and the educational level of the mother are strong determinants of cognitive development.

For example, the odds of being ready to learn for a child living in a family with an income of $40,000 is about 16% greater than a child who had similar background characteristics, but had a family income of $30,000.

Similarly, each additional year of education of a child's mother increases the odds of being ready to learn by about 10%. In contrast, children with more siblings were more likely to have a low score on at least one of the cognitive measures. Each additional brother or sister decreases the odds of being ready to learn by about 10%.

The results for the behavioural domain are similar. Family income and small family size are protective factors; that is, they increase the likelihood that a child will not have a behaviour problem upon entry to school. However, the mother's level of education was not statistically significant. The results also indicate that children whose fathers were unemployed were more likely to be ready for school. This finding is somewhat surprising; however, it may be that fathers who are unemployed are more likely to spend time engaged with their children in activities that have a positive effect on their behaviour.

With respect to physical health and well-being, two factors emerged as statistically significant: mother's education and number of siblings. Children were less likely to have experienced problems in this domain if their mothers had a high level of education, and if they had relatively few brothers and sisters.

Given the relationship between children's outcomes in these domains with family income and maternal education, and the relatively low income and education levels of the families in this particular community, the relatively strong performances of the children in Southwestern Newfoundland are especially noteworthy. It suggests that there are many other positive aspects of family and community life that have influenced their outcomes. We examine these factors in the next section.

IV. What Families and Communities in Southwestern Newfoundland Can Do to Improve Children's Outcomes

Many studies of childhood outcomes have been based on investment theory, an economic theory that supposes that children receive an *endowment* from their parents. This includes biological attributes and a cultural endowment determined by their parents' norms, values, and preferences; their income and wealth; and their access to resources. Parents *invest* time and money in their children, primarily through expenditures on education and health care.

Although the emphasis of investment theory has been on the transmission of earnings and wealth from one generation to the next, the idea that children's social, emotional, and intellectual development depends on parents' investments is firmly rooted in the child development literature. These investments can include, but are not limited to, time spent with children.[7]

Other theories suggest that childhood outcomes result from family and parenting practices. Children are less likely to have behaviour problems or poor cognitive development if their parents are supportive, responsive, and affectionate.

Parents who are depressed or severely stressed are more likely to be tense and irritable with their children, and become less engaged in activities that contribute to their emotional and intellectual development. Marital relations become strained, and the overall ability of the family to function as a cohesive unit becomes compromised. These pressures also affect children's development.

Recent research based on the NLSCY,[8] as well as analyses of the UEY communities' data reported here, consider the influence of both family processes and community factors on childhood outcomes.

The most important family processes include the parents' "style" of parenting, maternal depression, the cohesiveness or adaptability of the family, and the extent to which children are regularly engaged with learning activities.

Child care also plays a critical role. Many children have better outcomes if they have quality daycare, especially those from families of low socio-economic status.

Parents' ability to provide a supportive environment can be either helped or hindered by the neighbourhood and wider community. The quality and safety of the neighbourhood is important, but social factors also play a role.

Subsequently, we are interested in the degree of social support available to parents, and the extent to which parents have access to information and support through a strong network of friends and colleagues – factors embodied in the term "social capital". Social support and high levels of social capital are easier to build in a community when the population is not transient; thus, we also

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[7] McCain, M.N., & Mustard, J.F. (1999). *Reversing the Real Brain Drain: Early Years Study Final Report.* Publications Ontario.

[8] Willms, J. D. (in press). *Vulnerable Children: Findings from Canada's Longitudinal Study of Children and Youth.* University of Alberta Press.

expect that child development may be affected by the extent to which the population is stable.

Finally, children's development is more likely to flourish if families have access to educational, cultural and recreational resources. These are important not only because they contribute directly to children's development, but also because they foster social support and increase social capital within the community.

As we have seen in the previous two sections, the children in Southwestern Newfoundland fared well on the outcome domains for the EDI and the NLSCY Community Study compared to the EDI-16 sample and the national NLSCY.

This is at odds with what one might expect, given the range of socio-economic conditions in which they are living. Many of the children live in less affluent families than other Canadian children, and on average their parents have lower levels of education, and less regular, full-time employment. The percentage of children living in single-parent homes is higher than the Canadian average. Therefore, factors other than those associated with their immediate socio-economic status must also be at play.

The strategy was to combine a large number of family and community variables into ten indicators that are essential for successful child development. These indicators had to meet two criteria:

- There had to be evidence that the indicators were related to children's developmental outcomes, either from previous literature, or through analyses of the UEY and NLSCY data.
- They had to be amenable to change through the efforts and actions of families and communities, through the support of community and volunteer agencies, and through social policy at the local, provincial and national levels.

In this section, the ten indicators are described; the results of the analyses with the UEY data are presented, which give some indication of the relative importance of these factors; and the scores on these indicators for the Southwestern Newfoundland community are shown.

A. Ten Indicators of Family and Community Success

Each of the indicators is presented with scores ranging from 0 to 10, with 10 being the highest positive score.

1) Positive Parenting

This indicator was based on research that has shown that children have better developmental outcomes when their parents monitor their behaviour, are responsive to their needs, and encourage independence with a democratic approach.

This "style" of parenting, called "authoritative" parenting, stands in contrast to "authoritarian" parenting, characterized by parents being highly controlling and somewhat harsh in their approach to discipline, and "permissive" parenting, characterized by parents being overly-indulgent and setting few limits for behaviour.[9]

The scale includes items assessing the extent of positive interactions – how often the parents praise the child, how often they talk and play with them, and how often they laugh together. It includes items pertaining to whether parents are consistent and rational in their approach.

[9] Baumrind, D. (1991). The influence of parenting style on adolescent competence and substance abuse. *Journal of Early Adolescence*, 11(1), 56-95.

For example, parents were asked about situations when their child was misbehaving: were they likely to raise their voice, scold or yell at their child, calmly discuss the problem, or discuss alternate ways of behaving? Did they often have to punish their child repeatedly for the same behaviour? Did their punishment depend on the mood they were in?

2) Parental Engagement

This indicator measures the extent to which parents are engaged with their child in learning activities. It includes information on whether and how often parents tell stories to their children, teach them letters and numbers, teach them how to read, and encourage them to use numbers in their day-to-day activities. It also measures whether and how frequently children look at books and magazines, discuss them with their families and friends, and write or pretend to write with markers or pencils.[10]

3) Family Functioning

The concept of family functioning refers mainly to the cohesiveness and adaptability of the family. It concerns how well the family functions as a unit, more so than the relationships between spouses, or between parents and their children. A number of studies have shown that family functioning is related to children's developmental outcomes, especially children's behaviour.

In this study it is assessed with twelve items pertaining to a family's ability to communicate, make decisions and solve problems as a group, discuss feelings and concerns, get along together, and feel accepted for who they are.

4) Maternal Mental Health

The well-being of parents affects their parenting style and ability to respond to and engage their children in various learning activities.[11] Mothers' well-being has a stronger effect on children's outcomes than fathers' well-being.

This indicator was based on twelve items that are commonly used to measure depression. For example, it includes questions about whether the person regularly experiences feelings of depression and loneliness, crying spells, low energy levels, an inability to concentrate and sleep, and sense of being disliked by others. The scores were coded such that high scores indicate positive mental health; that is, the absence of depressed feelings.

5) Social Support

The level of social support available to parents affects their well-being, and indirectly affects their ability to function as parents and as role models within their family and community.

This indicator measures the level of support available to the respondent, and describes how much support that person receives from a community of friends and family members.

To determine this, respondents were asked whether they can get help in various situations, including emergencies; whether they are able to confide in and seek advice from others; whether they feel close to another person; and whether they feel they are a member of a group of people whose attitudes and beliefs they share.

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[10] McCain, M.N., & Mustard, J.F. (1999). *Reversing the Real Brain Drain: Early Years Study Final Report.* Publications Ontario.

[11] Brooks-Gunn, J., Duncan, G.J., & Britton, P.R. (1999). Are Socio-economic Gradients for Children Similar to Those for Adults? Achievement and Health of children in the United States. In D.P. Keating's & C. Hertzman's (Eds.) *Developmental Health and the Wealth of Nations.* The Guilford Press: New York.

6) Social Capital

A separate, but related indicator, social capital is a measure of the level of support available, collectively to groups within a community. Thus, it comprises information about the ability of neighbours to work together to solve problems, help each other, watch out for one another's children, and provide children with role models outside their immediate families.

7) Neighbourhood Quality

This indicator gauges the parents' perception of their neighbourhood as a place to raise children. It measures features such as cleanliness, safety, quality of schools and nursery schools, adequacy of facilities for children (such as pools and playgrounds), health facilities, and the level of involvement of residents. It also asks people to rate their present neighbourhood in comparison to neighbourhoods they had lived in previously.

8) Neighbourhood Safety

This indicator assesses the level of the parents' concern for children's safety in their neighbourhood. For example, parents were asked about the safety of parks and other play-spaces, crime rates, problems with older children in the neighbourhood, and whether they worried about children playing outside during the day.

9) Use of Resources

This indicator measures the use of *recreational facilities,* including parks, trails, play-spaces, skating rinks, pools, camping areas, skiing facilities, amusement parks, and community centers; *educational services,* such as libraries, science centers, family resource centers, and drop-in programs; and *cultural resources,* such as art museums, plays, musical performances, sports events, and movies.

10) Residential Stability

This factor was derived from a factor analysis of four variables measured as part of the 1996 Canadian Census that assessed the degree of transience of the local population. These include the proportion of people who had moved in the past five years or the past year, as well as the percentages of single parents and elderly in the neighbourhood. It was scaled in positive terms, such that a high score indicates greater stability. The average score for all enumeration areas in Canada is 5.0 on a 10.0 point scale.

B The Relationship between Neighbourhood Factors and Children's Outcomes

In the third section, statistical tools were used to estimate the relationships between family background factors and children's readiness to learn in three developmental domains: the cognitive domain, the behavioural domain, and the physical health and well-being domain.

In this section the analysis was extended to include the ten family and neighbourhood factors described previously. This is a fairly conservative test of the effects of these factors, as the analysis is essentially asking, "What are the effects of these factors, after taking account of children's family backgrounds?"

As in Section III, the results are presented as odds-ratios (see the Inset in Section III). For the ten scales describing family processes and neighbourhood factors, these provide an estimate of the effect associated with a one-point increase on the respective scale. The results, which are based on the combined data from the first five UEY communities, are presented in Table 4-1.

Table 4.1 – **The Relationship Between Readiness to Learn Outcomes and Family Background, Family Processes, and Community Factors**

	Five UEY Communities' Children's Outcomes		
	Cognitive	Behavioural	Physical Health & Well-being
Family Background			
Family Income ($10,000 units)	**1.14**	**1.08**	1.02
Mother's Education (years)	**1.07**	0.99	1.07
Father's Education (years)	1.04	1.00	**1.13**
Mother Not Working Outside Home	0.97	**1.24**	1.13
Father Not Working Outside Home	1.18	**1.38**	1.17
Single-Parent Family	1.01	1.00	0.70
Number of Brothers and Sisters	0.92	0.96	**0.84**
Family Processes			
Positive Parenting Practices	1.07	**2.31**	**1.37**
Engagement in Learning Activities	**1.10**	1.01	1.08
Family Functioning	0.98	1.05	**0.86**
Maternal Mental Health	0.98	**1.12**	0.99
Community Factors			
Social Support	1.02	**0.87**	1.07
Neighbourhood Quality	1.03	1.01	1.00
Safe Neighbourhood	1.02	**1.12**	0.93
Social Capital	1.01	1.06	1.06
Use of Resources	**1.11**	1.04	1.10
Residential Stability	**1.06**	1.02	**1.13**

NLSCY in relation to 3 EDI domains for the first five UEY communities.
Note: Figures in blue text are statistically significant at p<.10.

The co-efficients in Table 4.1 are slightly lower than in Table 3.1 because community factors are correlated with family background. For example, a family with a higher income generally lives in a relatively safer neighbourhood with a higher neighbourhood quality.

Of the ten factors, three have statistically significant relationships in the cognitive domain: engagement in learning activities, use of community resources, and residential stability.[12]

The engagement in learning results suggest that a child in a family with a rating of 6.0 on the 10-point scale would be 10% more likely to be ready to learn in the cognitive domain than a child living in a family with a rating of 5.0 (or a family rated 5.0 instead of 4.0, etc.). This means that parents who spend time reading to their children, and teaching them numbers and letters, have children with better cognitive scores.

An increase of one-point in "use of community resources" was associated with an 11% increase in cognitive scores. In other words,

[12] Numbers above 1.0 indicate a positive relationship whereas numbers below 1.0 indicate a negative relationship.

families that make use of various recreation, educational and leisure facilities, such as pools, play-spaces, libraries, drop-in programs, art museums and movies, have children with better cognitive scores.

Similarly, an increase of one point in residential stability was associated with a 6% increase in scores, which indicates that families with fewer moves have children with higher cognitive scores.

For the behavioural domain, positive parenting was by far the most important factor. A one-point increase on the positive parenting scale was associated with a dramatic increase in good behaviour outcomes of 131% in good behavior outcomes. This means that parents who monitor their children's behaviour, are responsive to their needs, and encourage independence, are much more likely to have children without behaviour problems.

Two other factors had statistically significant and positive effects: the mental health of the mother and living in a safe neighbourhood. Each of these factors was associated with a 12% increase in the likelihood of a child being ready to learn in the behavioural domain. This means that a mother with good mental health and families who live in safe neighbourhoods had children with fewer behavioural problems.

Social support had effects contrary to expectations. This may have arisen because parents whose children have behavioural problems may be more aware of the social support available to them, and therefore reported higher levels of support.

Residential stability also had a positive effect, meaning that children living in stable neighbourhoods were more likely to have positive health outcomes. The effects of family functioning were anomalous in this case, suggesting that families who have a child with health problems are more likely to be cohesive and adaptable.

Finally, for physical health and well-being, positive parenting again emerged as the most important factor. The analysis indicates that a one-point increase in the *positive parenting* scale is associated with a 37% increase in the likelihood of a child being ready to learn in this domain.

C. Community Indicator Scores for Southwestern Newfoundland

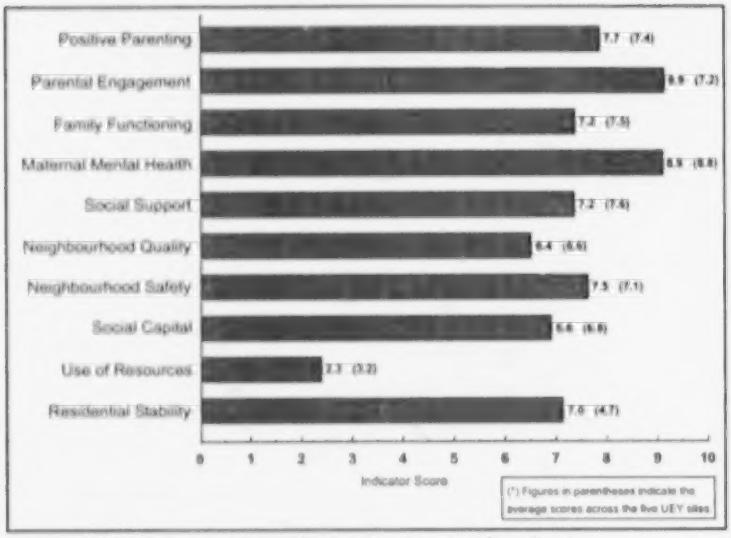
Figure 4.1 displays the Southwestern Newfoundland scores for each of the ten indicators described in this section. The figures in parentheses indicate the average scores for the five UEY communities.

The scores for Southwestern Newfoundland were particularly high on the two measures of parenting: 7.7 for positive parenting, and 8.9 for parental engagement. As parenting skills are of critical importance during the early years, the high scores of this community on these two indicators help explain why the children's outcomes are higher than expected given the relatively low socio-economic status.

This community was more stable than the other UEY communities, with a residential stability score of 7.0, compared with the UEY average of 4.7. Parents also considered their neighbourhood as a safe place to bring up their children. These factors may also have contributed to its success.

The community had relatively low scores on family functioning (7.2 compared to 7.5), social support (7.2 compared to 7.6), and use of resources (2.3 compared with 3.2). One might expect this community to score low on use of resources, given the long distance from

Figure 4.1 – Community Indicator Scores for Southwestern Newfoundland



Source: NLSCY-Community Survey for Southwestern Newfoundland (cycle 3), 1999-2000.

this community to a major urban center, which results in a lack of access to certain kinds of educational, cultural, recreational resources.

As described, there are a total of ten indicators of family and community success. Each indicator scale has a range from 0 to 10, with 10 being a positive score. A total score, out of 100, can be calculated for each community. The total score out of 100 for Southwestern Newfoundland is 69.9, which is 3 points above the average of 66.9 for the five UEY communities.

Since the score on use of community resources was low in all 5 UEY communities, this variable was further explored in each community to determine if a lack of availability of resources was the problem. For educational, cultural, and recreational resources, parents were asked, "Are most of these resources located within walking distance or within a short drive or bus ride?" The results for Southwestern Newfoundland presented in Figure 4.2, indicate that availability is an issue for educational and cultural resources, but is less of an issue for recreational resources.

Community Resources in Southwestern Newfoundland

A community can help serve its residents by offering a range of programs and services to meet the needs of children. These programs may offer opportunities to increase one's quality of life through a learning or recreational experience, while at the same time increasing social networks through participation. This section describes the resources available in Southwestern Newfoundland. See Appendix A for additional information concerning Early Learning and Care, Community-Based Educational Resources, Services for Children at Risk and with Special Needs, and Health and Community Services.

Eight program categories were examined:

- Early Learning and Care;
- Family Resources;
- Community-Based Educational Resources;
- Services for Children at Risk and Children with Special needs;
- Health and Community Services;
- Other Key Community Resources.

Early Learning and Care

There are very few preschools found in Southwestern Newfoundland. There is one Nursery school, located in Stephenville, that charges fees and a play school that is open to children ages two to four. One Co-op Preschool operated in Stephenville Crossing, offers reduced fees. Two unlicensed French preschools were located on the Port au Port Peninsula. A few areas had no preschools at all including St. George's, Flat Bay and no English programs on the Port au Port Peninsula

There are 16 Kindergartens located throughout the region under the supervision of the Cormack Trail School Board. The 16 Kindergartens are scattered throughout each of the five regions of Southwestern Newfoundland. There are also two French Kindergartens on the Port au Port Peninsula. There were only two day cares located in all of Southwestern Newfoundland.

Community-Based Educational Resources

Schools

Southwestern Newfoundland had 19 Primary Schools. There were also two French primary schools in Southwestern Newfoundland, one in Cape St. George and the other in Mainland.

Libraries

There were 15 libraries and literacy programs located in Southwestern Newfoundland, but no ESL Program. Five of these libraries were public and the remaining 10 were school libraries that were available for public use.

Family Resource Programs

Positive parenting practices have been related to increased prosocial behaviours in children and a decreased likelihood of behavioural problems.[13]

Resources that support families include:

- Family support centers (including drop in centers, toy lending libraries, play groups, support groups for teen mothers, and mother's networking groups);
- Parenting classes and programs (including parenting programs for parents of young children, mom and tot programs, and parenting programs focusing on all stages of child development); and
- Parent relief programs (providing a safe place for parents to drop off their children for a few hours).

Southwestern Newfoundland had 11 Family Resource Centers distributed throughout the five regions, located primarily in school settings. The centers were located in areas that are centrally found and, except for the centers in Ramea and Burgeo, served more than one community.

Figure 4.3 shows the distribution and locations of the parenting programs and family resources in Southwestern Newfoundland.

[13] Chao, R.K., & Willms, D.J. (1998, October). *Do parenting practices make a differences?* Paper presented at Human esources Development Canada's Investing in Kids Conference, Ottawa, Ontario.

Health and Community

There are Public Health Offices located in Piccadilly (Region A), Stephenville Crossing and St. George's (Region B), Burgeo (Region C) and Port aux Basques (Region D).

Services offered by Health and Community Services include: School Health Services, Health Check 3, Healthy Beginnings Program, Child Health Clinics, and Childbirth Education Programs.

Social Resources

Services for children at risk and children with special needs

Different services and programs were available for children-at-risk and their families, such as the Community Action Program for Children (Family Resources Centers). Of these:

- Four were located on the Port au Port Peninsula (Port au Port East, Cape St. George, Mainland, and Ship Cove.)
- One was located in Stephenville.
- Four were located in Bay St. George South (Stephenville Crossing, St. George's, Flat Bay and St. Fintan's).

There were no centers in Region D. Where possible, the Community Action Committee, located in Stephenville, offered some consultation and outreach services.

There were two family resource centers with programs for children at risk in Region C operating on a limited scale. These are located in Burgeo and Ramea. The Community Action Committee also offers some consultation in Francois.

Other Key Community Resources

Social Housing

There are 365 units for the entire Stephenville district including Bay St. George South, Port au Port Peninsula, and all of Bay St. George.

Southwestern Newfoundland Maps

Map 1, Parenting programs and family resources in Region A. The family resource centers and parenting classes were fairly evenly distributed throughout Region A.

Map 2, Parenting programs and family resources in Region B. The urban areas in Region B are more densely populated with children. The family resource centers and parenting classes were available in all of the urban areas.

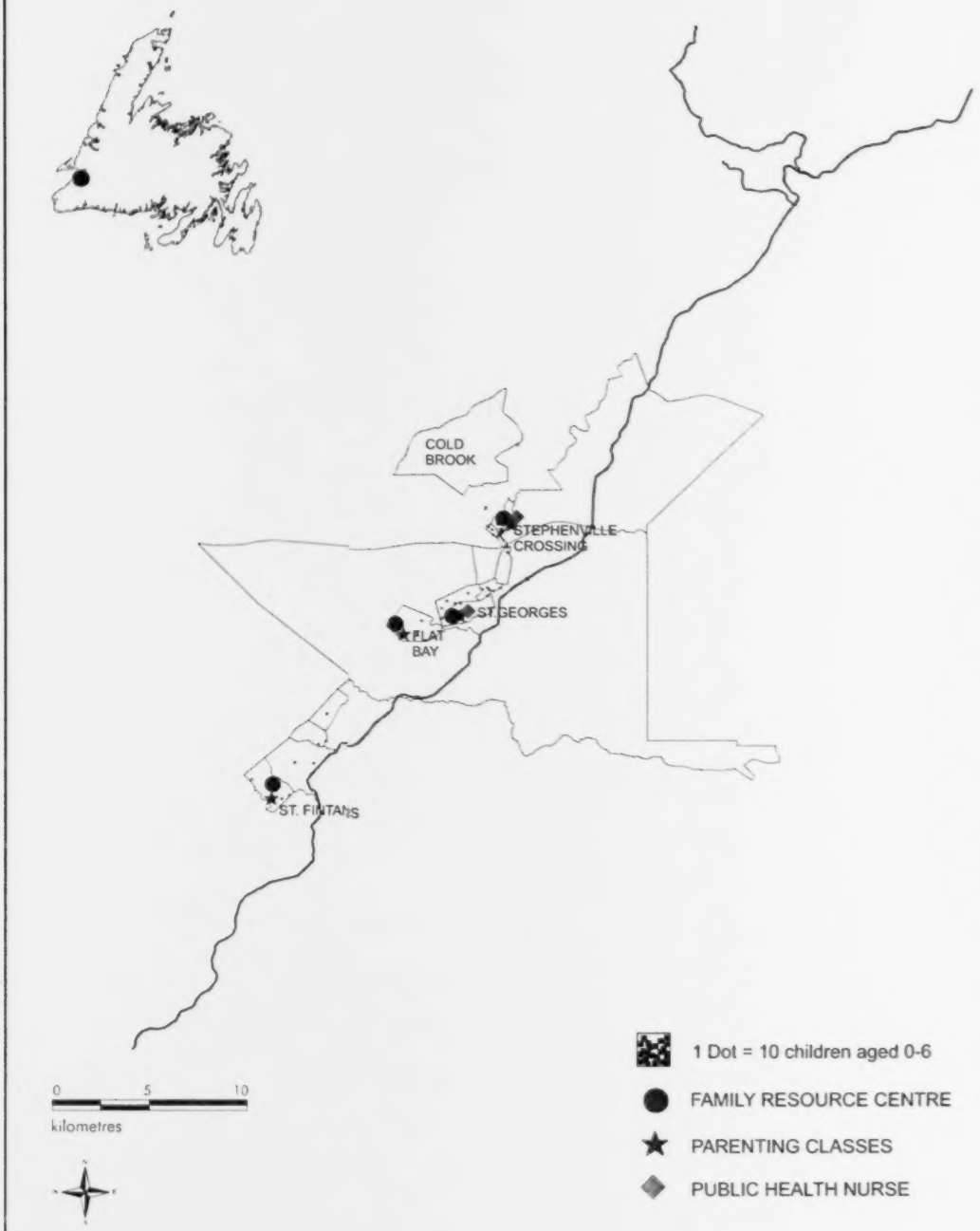
Map 3, Parenting programs and family resources in Region C. The southwestern tip of Region C had families with young children. Family resource centers, parenting classes, and public health nurses were available in both urban areas with children.

Map 4, Parenting programs and family resources in Region D. The urban areas of Region D were more densely populated with young children. There were parenting classes fairly evenly distributed throughout the southwestern communities in this region.

Map 5, Parenting programs and family resources in the town of Stephenville. The town of Stephenville was fairly densely populated with young children. There was a Family Resource Center and several parenting classes available in the town, as well as a public health nurse.

Map 1: Which areas of Region A had the greatest access to parenting programs and family resources?

Map 2: Which areas of Region B had the greatest access to parenting programs and family resources?



Map 3: Which areas of Region C had the greatest access to parenting programs and family resources?

1 Dot = 10 children aged 0-6

FAMILY RESOURCE CENTRE

PARENTING CLASSES

PUBLIC HEALTH NURSE

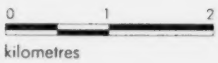
FERRY ROUTES

0 10 20

kilometres

Map 4: Which areas of Region D had the greatest access to parenting programs and family resources?

Map 5: Which areas of Stephenville had the greatest access to parenting programs and family resources?



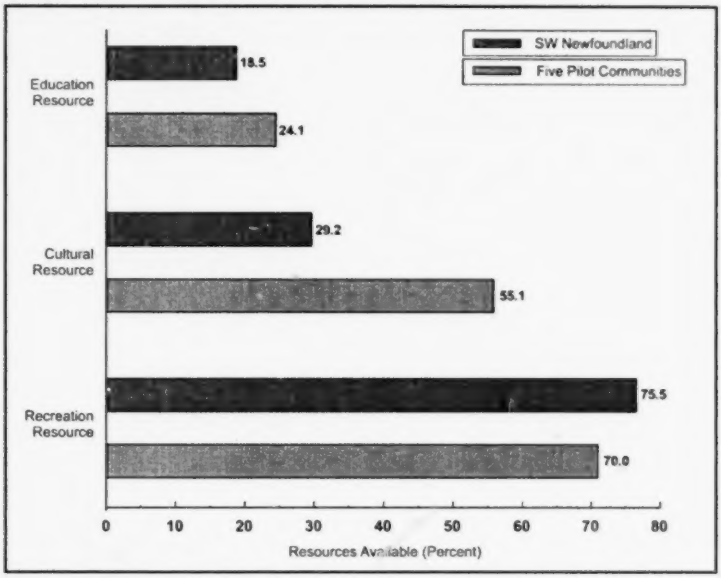
1 Dot = 10 children aged 0-6

FAMILY RESOURCE CENTRE

PARENTING COURSES

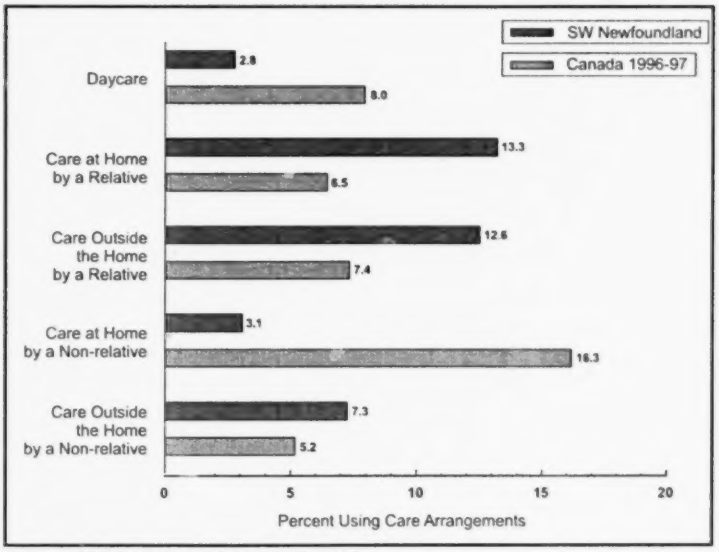
PUBLIC HEALTH NURSE

Figure 4.2 – Availability of Community Resources for Southwestern Newfoundland and the Five UEY Communities



Source: NLSCY data (cycle 3), 1999-2000.

Figure 4.3 – Types of Care Arrangements



Source: NLSCY data (cycle3), 1999-2000.

The NLSCY data also covered daycare. Early childhood programs, such as those offered at daycare, can increase a child's readiness for learning, thereby enhancing his or her lifelong academic and personal development.

But for these programs to be effective, they need to be developmentally appropriate and responsive to the experiences, backgrounds and needs of the children.[14] Research suggests that, regardless of a child's socio-economic status, four types of resources contribute to optimal child development: childcare centers, pre-schools, nursery schools, and kindergartens.

Moreover, research based on the first cycle of the NLSCY suggests that receiving daycare, either licensed or unlicensed, has positive effects on the language skills of children from low-income families. However, children from relatively affluent families tend to fare equally well across various types of care arrangements.[15]

In 1996-97, according to the NLSCY, about one-half (48.4%) of the population of 5 and 6 year old children in Canada received care for at least part of the day by someone other than their parents. In contrast, only 39.2% of the children in this Southwestern Newfoundland community received care outside of the home.

Figure 4.3 displays the percentage of children in differing types of care arrangements for Southwestern Newfoundland, compared with the figures for Canada for 1996-97, derived from the NLSCY.

The children in this community were less likely to receive daycare, compared with children living elsewhere in Canada, and were much more likely to receive care by a relative, either inside or outside the home. Only 3.1% of the children in this community were cared for at home by a non-relative, whereas this is the most popular type of care arrangement in Canada. A relatively high percentage of children, 7.3% compared with 5.2%, were cared for outside the home by a non-relative.

[14] Doherty, G. (1997). *Zero to six: The basis for school readiness.* Hull, Québec: Human Resources Development Canada, R-97-8E.

[15] Kohen, D., Hertzman, C., & Willms, J. D. (in press). The importance of quality child care. In J. D. Willms (Ed.), *Vulnerable Children: Findings from Canada's National Longitudinal Study of Children and Youth.* University of Alberta Press.

V. Looking Forward

Overall, the children of Southwestern Newfoundland were healthy and showed strong signs of positive development and readiness for learning. Parents had relatively strong parenting skills and were regularly engaged with their children in learning activities, factors which undoubtedly contribute to the community's success in achieving high levels of children's outcomes.

The community had high scores on wider community indicators describing its levels of social capital, the safety of its neighbourhoods, and residential stability.

Although many Canadian communities share at least some of these broader characteristics, each community also exhibits a variety of unique features that set it apart from others.

This is one of the reasons community-based research is so important. Research allows a community to understand how well its youngest citizens are developing and lends insight into how the obtained results came about. Investments for families and children, as well as for children's development, can be monitored over time so that effectiveness and efficiency of community effort can be improved.

This community can take pride in the success of its youngest children. However, there is room for improvement. Over 10% of its children had low scores on the Social Knowledge and Competence domain of the Early Development Instrument, and 9.5% had low scores on the nationally standardized Receptive Language Test. These early language and literacy skills are critical for school success. The most important factor for improving early language and literacy skills is the quantity and quality of language a child is exposed to. For example, children whose mothers are more talkative learn new words at a faster pace than children with less talkative mothers. Although this point may seem obvious, it is less obvious how to increase children's exposure to language. For many children, attending a high quality daycare can help improve these skills.

A. What Makes Southwestern Newfoundland Unique?

Several features stand out as unique to Southwestern Newfoundland. First, in most respects, this community could be characterized as disadvantaged in socio-economic terms, but rich in family and community resources. Second, its parenting capabilities are exemplary. Third, it can take action to increase use of community and social resources.

Socio-economic Composition

In socio-economic terms, Newfoundland is the poorest province in the country, and this community is one of the poorer communities within Newfoundland. It had a much higher percentage of families with low levels of education and low family income than the provincial average, and a higher percentage of both mothers and fathers were not working outside of the home. The demographic maps of the community indicate that it is uniformly poor, with a few small areas that have markedly low socio-economic status.

Parenting

The parents of the community had very high ratings on all four of the measures of parenting practices. Earlier research on child development has emphasized the importance of "risk factors" such as low family income, low levels of parental education, and unemployment. Although these factors are

correlated with children's outcomes, they are less important than what parents actually *do* on a day-to-day basis: "what matters most is the kind of family environment a child lives in: the benefits of good parenting skills, a cohesive family unit, and parents in good mental health, far outweigh the negative effects associated with poverty".[16] This community is really a text-book case for making this point. Despite the low levels of socio-economic status of this community, it has overcome the odds through strong parenting within the family.

Resource Utilization

The results of this study suggest that there is room for improvement in the use of educational, cultural, and recreational resources. Although many children used recreational facilities such as parks and play spaces and educational services such as libraries, their participation rates were somewhat lower than those in the rest of the province or country in other activities. Participation in activities and use of child-oriented resources is important to a child's social, behavioural and physical development. Children's participation in supervised and unsupervised sports and arts-oriented activities is associated with increased psychosocial development.[17] This emphasizes the importance of addressing existing barriers to resource use such as time, cost, and looking at the distribution of certain resources. Because children and their families were not using existing resources to their full potential, their importance for development could be promoted and their presence in the community advertized.

Social Support

Increasing levels of Social Support and Social Capital could contribute to improving children's outcomes. For example, over one-quarter of the children in this community live in single-parent families. It is especially difficult for these parents to take advantage of community resources that are available. For some of these parents, having a neighbour who takes their child to swimming lessons once a week may be a tremendous form of Social Support, for others it might simply be having an affordable caregiver.

B. Summary

Southwestern Newfoundland is one of the first communities participating in the UEY initiative. Through this initiative, valuable lessons are being learned about the needs and strengths of communities with different economic, social and physical characteristics. With respect to early childhood development, valuable lessons are also being learned about how communities are working to improve children's outcomes, as well as the relative success (or lack thereof) of their efforts.

Communities will determine how their citizens will work together to improve children's early developmental outcomes. Results from the UEY initiative will inform the discussion in the community for future action.

At the same time, it is a societal responsibility – of governments, educators, community agencies, neighbourhoods and families – to make sure improvements take place for all children. Strategies that require the community to look at itself as a whole community, as well as neighbourhood by neighbourhood, will likely have more enduring effects. UEY is able to provide research results to support both.

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[16] Willms, J. D. (in press). Implications of the Findings for Social Policy Renewal. In J. D. Willms (Ed.), *Vulnerable Children: Findings from Canada's National Longitudinal Study of Children and Youth*. University of Alberta Press.

[17] Offord, D.R., Lipman, E.L., & Duku, E.K. (1998). *Sports, The Arts and Community Programs: Rates and Correlates of Participation*. HRDC, Applied Research Branch Working paper W-98-18E.

For example, neighbourhood by neighbourhood, families may improve their outdoor play-spaces, and on a community level, concerned agencies and organizations could improve community-wide strategies to integrate disadvantaged groups. As communities document their efforts, as well as their results, effective practices will be identified.

Any community's response must consider its unique features of the area. The importance of a co-ordinated approach involving families, teachers, and all community members must be emphasised because each has been shown to be important in enhancing a child's development. Governments, community institutions, schools, and the voluntary sector in Southwestern Newfoundland must continue to work together, as each can make a valuable and important contribution. Support for families with children from the larger community network is critical.

Appendix A

Neigbourhood Resources

Theories based on neighborhood resources view the community itself as a resource for human development. Resources in the neighborhood support families and neighborhood residents by complementing their efforts to raise their children well. By investigating links between the quantity of services available for children (such as police, parks, recreation, health and social services) with the development outcomes of children (such as emotional and cognitive development), communities can evaluate the effectiveness of these resources and determine best how to distribute them.

Such theories imply that increased, as well as appropriate availability of programs and services will lead to enrichment of experiences, more opportunities for development and support of social networks, and fewer chances of developing problems. Scarcity of resources, on the contrary, can result in reduced opportunities for enrichment, lack of supportive environments, and higher need for preventive and corrective action. The provision of services can be expensive and labour intensive, therefore it is essential to have the best mix and right coverage of services based on their impact on families and children.

How were services distributed in Southwestern Newfoundland?

Six program categories that are important to influencing child development outcomes were examined. These program categories include:

- special interest (e.g., Ukranian language class);
- education;
- societal (for example, programs for special needs children);
- health services;
- sports and recreation; and
- entertainment and culture.

Community researchers in Southwestern Newfoundland first created an inventory of programs, then contacted agencies offering programs throughout the region to collect information about: the types of services they offered, the intended recipients, barriers to participation, and areas of concern.

Educational Resources

Three potential types of educational resources can support children's development:

- Resources targeted directly to children such as preschools and Kindergartens);
- Resources targeted to parents or families (such as parenting programs, parent relief programs or family support programs); and
- Community-based resources available to all residents.

A child's readiness to learn at entry to formal schooling is an important indicator of his or her future academic and social success, which in turn can influence his or her life-long prospects for employment and financial security. Educational programs for young children that enhance their physical, social, emotional and cognitive development help provide the foundation for later learning.

Preschools and Kindergarten

Preschools are learning-focused play centers. In the Southwestern Region of Newfoundland there is one Nursery school in Stephenville that charges fees as well as a play school that is open to children from two to four and one Co-

op Preschool in Stephenville Crossing with reduced fees. There are two French unlicensed preschools on the Port au Port Peninsula. The remaining preschools in the region are unlicensed with no fee and some transportation subsidies. They are located in:

Port aux Basques - St. James Elementary School
St. Anne's – Codroy Valley
Cassidy Memorial – St. Fintan's
St. Michaels – Rose Blanche
Le Gallais – Isle aux Morts
Burgeo – Community Center
Ramea – St. Boniface

These preschool programs are run by volunteers. Many of them are parents who are having major concerns and problems dealing with behavioural issues. Also, there are a number of areas that had no preschool programs at all. These areas include the Port au Port Peninsula (no English language preschool), St. George's and Flat Bay.

The Community Action Program for Children (located in Stephenville) is responsible for overseeing Family Resource Centers for Children (0-6 and their families). They are presently offering six week Pre-K Readiness Programs in areas where no Pre-K Programs exist (Ship Cove FRC, St. Thomas Aquinas School in Port au Port East, St. George's FRC, Flat Bay FRC and also Stephenville FRC) to address the needs of families who could not afford to pay or were not eligible for subsidies. For these programs there were no transportation subsidies available and this is a major issue given the geographic area. A proposal to the provincial department of Human Resources and Employment for a transportation budget was approved as a pilot for one year.

Kindergarten programs in Southwestern Newfoundland provide children with their first experience in the school system and offer a variety of learning activities in a structured environment. In Newfoundland, a child enters Kindergarten at age 5. They may be 4 in September but will turn five by December. The program typically operates during 50 percent of the school week.

Participation in learning-based preschool programs can lead to achievement gains, and in some cases, gains in self-esteem, motivation and social behaviour (Westchest Institute for Human Services, 2000). Kindergarten programs also have the potential to increase a child's readiness for learning, hereby enhancing his or her lifelong academic and personal development. However, in order for these programs to be effective in helping children achieve their optimal potential, they need to be developmentally appropriate and responsive to the experience, backgrounds and needs of the students.[18]

- There are 16 Kindergartens located throughout the region under the supervision of the Cormack Trail School Board. There are also two French Kindergartens on the Port au Port Peninsula.

- The 16 Kindergartens are scattered throughout each of the five regions of Southwestern Newfoundland.

Parent and Family - Focused Educational Resources

Positive parenting practices have been related to increased pro-social behaviours in children and a decreased likelihood of behavioural problems.[19] The literature also suggests that

[18] Doherty, G. (1997) *Zero to six: The basis for school readiness*. Hull, Quebec: Human Resources Development Canada, R-97-8E.

[19] Chao, R.K., & Willms, D.J. (1998, October) *Do parenting practices make a differences?* Paper presented at Human esources Development Canada's Investing in Kids Conference, Ottawa, Ontario.

parenting and life skills training for adults can serve as a protective factor to decrease a child's risk for problems.[20]

Southwestern Newfoundland had 11 family resource centers distributed throughout the five regions:

- Stephenville - L.S. Eddy Complex

  In Region A - Port au Port East - St. Thomas Aquinas Primary/Elementary
  Mainland - Ecole St. Anne
  Cape St. George - Our Lady of the Cape

  In Region B - Stephenville Crossing - St. Michael's Elementary
  St. George's - Local Rental of Space
  Flat Bay - Native Band Council Building
  St. Fintan's - Cassidy Elementary

  In Region C - Burgeo - Community Center
  Ramea - St. Boniface All Grade

  In Region D - There are no Family Resource Centers.

- There were 15 parenting programs and classes that were being offered. These programs were offered in more than one location and were ongoing at the same time. (e.g., Early Childhood STEP Program could be offered in Port au Port and Stephenville and Stephenville Crossing at the same time.)

- The Family Resource Centers are located throughout the region and are mainly school-based. The centers are centrally located and serve more than one community, except for Ramea and Burgeo.

- Stephenville Family Resource Centers serve Stephenville, Noels Pond and Cold Brook. Most parents from Kippens come to Stephenville rather than go to Port au Port East.

- In Region A - The Family Resource Center in Port au Port East serves families in Port au Port East, Port au Port West, Point au Mal, Fox Island River, Boswarlos, Aguathuna and Felix Cove.

- The Family Resource Center in Ship Cove serves the communities of Lourdes, Black Duck Brook, West Bay, Piccadilly, Ship Cove, Abrahams Cove and Campbells Creek.

- The Family Resource Center in Cape St. George serves the communities of Cape St. George, Degrau, Sheaves Cove, Marches Point, Red Brook and Lower Cove.

- The Family Resource Center in Mainland serves the communities of Mainland and Three Rock Cove.

- In Region B - Stephenville Crossing Family Resource Center serves Black Duck Siding, Stephenville Crossing and Mattis Point.

- St. George's Family Resource Center serves Barachois Brook and St. George's.

- Flat Bay serves Flat Bay and St. Theresa's.

- St. Fintan's serves St. David's, Maidstone, Highlands, Heatherton, McKays, Jeffrey's and Robinsons.

- The Family Resource Centers in Region C serves Ramea and Burgeo simply because residents of Grey River and Francois have no access other than by boat.

- No Centers are located in Region D.

[20] Harachi, T.W., Catalano, R.F., & Hawkins, J. D. (1997). Effective recruitment for parenting programs within ethnic minority communities. *Child and Adolescent Social Work Journal, 14(1),* 23-39.

Community-Focused Educational Resources

Research suggests that children from families where parents do not speak either official language or have low literacy may suffer from a diminished opportunity or take longer to acquire literacy skills. This advantage can be compounded in families where parents have low levels of educational attainment or in families living in poverty (National Institute of Adult Education: Adult Literacy and Basic Skills Unit, 1993).

- Southwestern Newfoundland did not have an ESL Program. It did have 15 libraries and literacy programs.

- There were five public libraries located in Southwestern Newfoundland. The remaining ten were school libraries that were available for public use.

Public Libraries were located in:

Stephenville
Stephenville Crossing - Region B
St. George's - Region B
Burgeo - Region C
Port aux Basques - Region D

School/Public Libraries:

- Port au Port East - Region A
- Lourdes - Region A
  Cape St.George - Region A
- St. Fintan's - Region B
- Ramea - Region C
- Grey River - Region C
- Francois - Region C
- Belanger/Upper Ferry - Region D
- Isle aux Morts - Region D
- Burnt Islands - Region D

- Literacy Programs are offered at school located throughout the Cormack School District. The following Programs are offered: Accelerated Reading, Tutors for Tuition, Guided Reading and Buddy Reading.

- Burgeo in Region C has an Adult Basic Education Center at the high school.

- In Stephenville the Pathfinder Learning Center was established recognizing that the traditional school environment does not meet the needs of all students. The school district, in partnership with the College of the North Atlantic and the support of Human Resources Development Canada and Human Resources and Employment, established the Pathfinder Learning Center to serve a group of at-risk high school students and former drop-outs aged 15-24 from a number of schools. Using the computer-managed Pathfinder Learning system, students follow individual learning paths that allow them to complete high school credits or Adult Basic Education credits. This program connects them with potential career opportunities, provides work experience, and helps them develop an Employability Skills Portfolio.

- Directions Alternative School has more recently been established to provide more intensive interventions with an even younger population of youth-at-risk. It is an educational experience for students aged 12-16 who are severely challenged in one or more of the following areas: behaviourally, psychosocially or emotionally.

- Stephenville and Port aux Basques also have literacy councils. These councils provides trained tutors to assist people in improving their basic and functional skills.

- In Stephenville and Port aux Basques Adult Basic Education Programs are also offered through the campus of the College of the North Atlantic.

- Also located at Stephenville and Port aux Basques are the Books for Babies Programs. They ensure that every baby born gets an introductory package and a book.

Social Resources

Services for children at risk and children with special needs

Many children may experience multiple risk factors in their lives such as low-income status, negative parenting practices, parental separation, or abuse. Such children may grow to experience problems such as poor health, emotional or behavioural problems, and difficulties in learning. Therefore, in order to enhance children's capacity for successful development, accessible and effective programs and services need to be available for children and their families living in high-risk circumstances.

- Different services and programs were available for children at risk and their families, such as Community Action Program for Children (Family Resource Centers):
- Four of these programs are located on the Port au Port Peninsula - Port au Port East, Cape St. George, Mainland and Ship Cove.
- One is located in Stephenville.
- Four are located in Bay St. George South - Stephenville Crossing, St. George's, Flat Bay and St. Fintan's.
- There are no Centers in Region D. Although where possible the Community Action Committee, located in Stephenville, offers some consultation and outreach services.
- There are two family resource centers with programs for children at risk in Region C operating on a limited scale. These are located in Burgeo and Ramea. The Community Action Committee has also offered some consultation in Francois.
- Programs offered at Family Resource Centers include:

Child/Parent Programs:

- Drop-in Play;
- Toddler Time;
- Baby Talk; and
- Pre-K Programs.

Parenting Courses:

- Childsafe;
- 1,2,3,4, Parents;
- Nobody's Perfect;
- Early Childhood STEP Program; and
- How To Talk So Kids Will Listen and Listen So Kids Will Talk.

Services offered by the Cormack Trail School Board include:

- Speech Language Pathologist;
- Itinerant Teacher for the Visually Impaired;
- Itinerant Teacher for the Hearing Impaired;
- Guidance Counseling;
- School Psychologist; and
- Special Education Programs.

Other services are offered through Health and Community Services whose main office is in Stephenville.

There are also Public Health Offices located in Piccadilly (Region A), Stephenville Crossing and St. George's (Region B), Burgeo (Region

C) and Port aux Basques (Region D).

Services offered by Health and Community Services include:

School Health Services - Public Health Nurse visits schools on a regular basis to do immunization, health education, screening for vision and hearing and supportive counseling.

Health Check 3 - For children ages 3 yrs 9 months to 4 yrs 2months. Determines immunization status, and screens for visions, hearing, developmental and speech problems.

Healthy Beginnings Program - The Healthy Beginnings Program assists Public Health Nurses identify, through universal screening assessments, individuals, families and children who require specific follow-up. Infants and their families assessed as having developmental, disability or social interaction risks receive specific follow-up. Early identification, intervention and prevention are emphasized with the goal to ensure optimal health outcomes for children.

Child Health Clinics - For children under 2 years of age. Focuses on immunization, development, screening for vision and hearing, and providing nutrition and parent information.

Childbirth Education Program - For prenatal parents and caregivers. Sessions are based on assessed needs of parents and can cover topics such as nutrition, breast feeding, smoking and general health issues for baby and mother.

The services provided by the School Board and Health and Community Services are in demand and many have waiting lists.

Social Housing

Access to affordable, safe and quality housing is one of the most fundamental needs common to all Canadians. At the same time, many families face difficulties in finding such housing, especially when they find themselves spending an increasing proportion of their income in shelter.

There are 365 social housing units for the entire Stephenville district including Bay St. George South, Port au Port Peninsula, and all of Bay St. George.

Broken down they are (Regions A,B,C and Stephenville)

- 197 Apartments in Stephenville;
- 123 Single Family Dwellings (Outside Stephenville);
- Rent Supplements given to 33 households renting from private landlords; and
- 12 Seniors cottages in Stephenville.

For Region D

Codroy Valley - 4 units; and
Port aux Basques - 24 units.